Access DB# _____

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Jeffrey E. Russel Examiner #: 62785 Date: 7-2-2003
Art Unit: 1654 Phone Number 308-3975 Serial Number: 09/937,687
Mail Box and Bldg/Room Location: CM1-11013/CM1-9807 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

****

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc. if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Peptide

Inventors (please provide full names): F. O'Harte, P. Flatt

Earliest Priority Filing Date: 5-9-2002

**For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

Please search residues 1-15 of SEQ ID NO:1 (YAEGTFI SDYSIAMD) in STN, in the U.S. patent application sequence database (pending, published, & issued), and in Geneseq (SwissProt/PIR.

Thank you.

JER

STAFF USE ONLY Point of Contact P. Sheppard Telephone number: (703) 308-4499

Searcher: _____ Type of Search: Nucleic Sequence (#) _____ Vendors and cost where applicable: STN _____

Searcher Phone #: _____ AA Sequence (#) _____ Dialog _____

Searcher Location: _____ Structure (#) _____ Questel/Orbit _____

Date Searcher Picked Up: _____ Bibliographic _____ Dr Link _____

Date Completed: 7/2/03 Litigation _____ Lexis/Nexis _____

Searcher Prep & Review Time: _____ Fulltext _____ Sequence Systems _____

Clerical Prep Time: _____ Patent Family _____ WWW/Internet _____

Online Time: _____ Other _____ Other (specify) _____

GenCore version 5.1.6

OM protein - protein search, using sw model

Run on: July 2, 2003, 19:11:29 ; Search time 30 Seconds
(without alignments)
103.024 Million cell updates/sec

Title: US-09-937-687-1_COPY_1_15
Perfect score: 77
Sequence: 1 YAEGTFISDYSIAMD 15

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 671580 seqs, 206047115 residues

Total number of hits satisfying chosen parameters: 671580

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : SPTREMBL_21:*
1: sp_archea:*
2: sp_bacteria:*
3: sp_fungi:*
4: sp_human:*
5: sp_invertebrate:*
6: sp_mammal:*
7: sp_mhc:*
8: sp_organelle:*
9: sp_phage:*
10: sp_plant:*
11: sp_rodent:*
12: sp_virus:*
13: sp_vertebrate:*
14: sp_unclassified:*
15: sp_rvirus:*

16: sp_bacteriap:*
17: sp_archeap:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	77	100.0	130	11	Q9CVF1	Q9cvf1 mus musculu
2	77	100.0	144	11	Q9D887	Q9d887 mus musculu
3	51	66.2	62	13	Q9PRW9	Q9prw9 scyliorhinu
4	46	59.7	204	13	O12956	O12956 heloderma s
5	46	59.7	777	10	Q9ZS44	Q9zs44 lycopersico
6	45	58.4	160	13	Q9PUR1	Q9pur1 petromyzon
7	45	58.4	180	6	Q95LG0	Q95lg0 canis famil
8	45	58.4	206	13	Q91410	Q91410 gallus gall
9	45	58.4	219	13	O42144	O42144 xenopus lae
10	45	58.4	220	13	Q8UWL9	Q8uwl9 hoplobatrac
11	45	58.4	266	13	O42143	O42143 xenopus lae
12	44	57.1	350	10	Q93ZU4	Q93zu4 arabidopsis
13	44	57.1	606	10	Q9STW5	Q9stw5 arabidopsis
14	43	55.8	761	10	O82777	O82777 lycopersico
15	42	54.5	709	2	Q9Z4R7	Q9z4r7 eikenella c
16	42	54.5	746	5	O01654	O01654 halocynthia
17	42	54.5	1062	10	Q93YX6	Q93yx6 medicago tr
18	42	54.5	1210	3	Q9UVA1	Q9uva1 candida alb
19	41	53.2	120	13	Q9PUR0	Q9pur0 petromyzon
20	41	53.2	121	13	Q9DDE6	Q9dde6 brachydanio
21	41	53.2	178	13	Q91971	Q91971 oncorhynchu
22	41	53.2	249	16	Q9HZP6	Q9hzp6 pseudomonas
23	41	53.2	1025	10	P93067	P93067 brassica ol
24	40	51.9	171	11	Q9D2Z7	Q9d2z7 mus musculu
25	40	51.9	424	5	Q9VB19	Q9vb19 drosophila
26	40	51.9	428	5	Q8SXF2	Q8sxf2 drosophila
27	40	51.9	435	16	Q9RTR7	Q9rtr7 deinococcus
28	40	51.9	490	16	P96442	P96442 rhizobium m
29	40	51.9	792	16	Q92YZ6	Q92yz6 rhizobium m
30	40	51.9	1037	10	Q8W0V0	Q8w0v0 medicago tr
31	39	50.6	97	8	Q94Z14	Q94z14 pylaiella l
32	39	50.6	99	17	Q980L9	Q980l9 sulfolobus
33	39	50.6	343	8	Q9ZZ38	Q9zz38 trichophyto

34	39	50.6	396	10	O49647	O49647 arabidopsis
35	39	50.6	905	3	Q9UVA0	Q9uva0 issatchenki
36	39	50.6	1014	10	Q9FVE8	Q9fve8 glycine max
37	39	50.6	1033	10	Q93YX7	Q93yx7 medicago tr
38	39	50.6	1141	5	Q8SR75	Q8sr75 encephalito
39	39	50.6	1368	5	Q9N531	Q9n531 caenorhabdi
40	39	50.6	1401	5	Q9N530	Q9n530 caenorhabdi
41	38.5	50.0	255	10	Q9M0F5	Q9m0f5 arabidopsis
42	38	49.4	99	10	O04822	O04822 sporobolus
43	38	49.4	119	16	Q9CIX8	Q9cix8 lactococcus
44	38	49.4	326	16	Q9A642	Q9a642 caulobacter
45	38	49.4	416	16	Q92EB0	Q92eb0 listeria in

ALIGNMENTS

RESULT 1
Q9CVF1
ID Q9CVF1 PRELIMINARY; PRT; 130 AA.
AC Q9CVF1;
DT 01-JUN-2001 (TrEMBLrel. 17, Created)
DT 01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
DT 01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DE Gastric inhibitory polypeptide (Fragment).
GN GIP.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J; TISSUE=SMALL INTESTINE;
RX MEDLINE=21085660; PubMed=11217851;
RA Kawai J., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y.,
RA Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S.,
RA Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R.,
RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
RA Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H.,
RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
RA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
RA Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
RA Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,

RA Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
RA Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P.,
RA Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,
RA Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,
RA Suzuki H., Toyo-oka K., Wang K.H., Weitz C., Whittaker C., Wilming L.,
RA Wynshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
RA Hayashizaki Y.;
RT "Functional annotation of a full-length mouse cDNA collection.";
RL Nature 409:685-690(2001).
DR EMBL; AK008525; BAB25720.1; -.
DR HSSP; P01274; 1GCN.
DR MGD; MGI:107504; Gip.
DR InterPro; IPR000532; Glucagon.
DR Pfam; PF00123; hormone2; 1.
DR SMART; SM00070; GLUCA; 1.
DR PROSITE; PS00260; GLUCAGON; 1.
FT NON_TER 1 1
SQ SEQUENCE 130 AA; 14906 MW; 95B3B6E91E2A7992 CRC64;

Query Match 100.0%; Score 77; DB 11; Length 130;
Best Local Similarity 100.0%; Pred. No. 7.3e-06;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 YAEGTFISDYSIAMD 15
||||||||||||||||
Db 30 YAEGTFISDYSIAMD 44

RESULT 3
Q9PRW9
ID Q9PRW9 PRELIMINARY; PRT; 62 AA.
AC Q9PRW9; Q9PRX0; Q9PRW8;
DT 01-MAY-2000 (TrEMBLrel. 13, Created)
DT 01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
DT 01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
DE Glucagon precursor [Contains: glucagon-29; glucagon-33; glucagon-like
DE peptide] (Fragments).
OS Scyliorhinus canicula (Spotted dogfish) (Spotted catshark).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Chondrichthyes;
OC Elasmobranchii; Galeomorphii; Galeoidea; Carcharhiniformes;
OC Scyliorhinidae; Scyliorhinus.
OX NCBI_TaxID=7830;
RN [1]
RP SEQUENCE.
RC TISSUE=PANCREAS;
RX MEDLINE=94286411; PubMed=8015974;

RA Conlon J.M., Hazon N., Thim L.;
RT "Primary structures of peptides derived from proglucagon isolated from
RT the pancreas of the elasmobranch fish, Scyliorhinus canicula.";
RL Peptides 15:163-167(1994).
CC -!- FUNCTION: PROMOTES HYDROLYSIS OF GLYCOGEN AND LIPIDS, AND RAISES
CC THE BLOOD SUGAR LEVEL.
CC -!- SIMILARITY: BELONGS TO THE GLUCAGON FAMILY.
DR HSSP; P01274; 1GCN.
DR InterPro; IPR000532; Glucagon.
DR PRINTS; PR00275; GLUCAGON.
DR SMART; SM00070; GLUCA; 2.
DR PROSITE; PS00260; GLUCAGON; 2.
KW Glucagon family; Hormone.
FT PEPTIDE 1 29 GLUCAGON-29.
FT PEPTIDE 1 33 GLUCAGON-33.
FT NON_CONS 33 34
FT PEPTIDE 34 62 GLUCAGON-LIKE PEPTIDE.
SQ SEQUENCE 62 AA; 7270 MW; C5FF487C12C69CD1 CRC64;

Query Match 66.2%; Score 51; DB 13; Length 62;
Best Local Similarity 66.7%; Pred. No. 0.13;
Matches 10; Conservative 2; Mismatches 3; Indels 0; Gaps 0;

Qy 1 YAEGTFISDYSIAMD 15
::|||| |||| ||
Db 1 HSEGTFTSDYSKYMD 15

Search completed: July 2, 2003, 19:13:05
Job time : 32 secs

GenCore version 5.1.6

OM protein - protein search, using sw model

Run on: July 2, 2003, 19:11:25 ; Search time 11 Seconds
(without alignments)
56.559 Million cell updates/sec

Title: US-09-937-687-1_COPY_1_15
Perfect score: 77
Sequence: 1 YAEGTFISDYSIAMD 15

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 112892 seqs, 41476328 residues

Total number of hits satisfying chosen parameters: 112892

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : SwissProt_40:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	77	100.0	42	1	GIP_BOVIN	P09680 bos taurus
2	77	100.0	42	1	GIP_PIG	P01281 sus scrofa
3	77	100.0	144	1	GIP_MOUSE	P48756 mus musculu
4	77	100.0	144	1	GIP_RAT	Q06145 rattus norv
5	77	100.0	153	1	GIP_HUMAN	P09681 homo sapien

6	51	66.2	29	1	GLUC_SCYCA	P09687 scyliorhinu
7	48	62.3	29	1	GLUC_TORMA	P09567 torpedo mar
8	47	61.0	29	1	GLUC_CALMI	P13189 callorhynch
9	45	58.4	29	1	GLUC_ANAPL	P01276 anas platyr
10	45	58.4	29	1	GLUC_CHIBR	P31297 chinchilla
11	45	58.4	29	1	GLUC_DIDMA	P18108 didelphis m
12	45	58.4	29	1	GLUC_RABIT	P25449 oryctolagus
13	45	58.4	69	1	GLUC_CANFA	P29794 canis famil
14	45	58.4	75	1	GLUC_AMICA	P33528 amia calva
15	45	58.4	103	1	GLUC_RANCA	P15438 rana catesb
16	45	58.4	151	1	GLUC_CHICK	P01277 gallus gall
17	45	58.4	158	1	GLUC_PIG	P01274 sus scrofa
18	45	58.4	180	1	GLUC_BOVIN	P01272 bos taurus
19	45	58.4	180	1	GLUC_CAVPO	P05110 cavia porce
20	45	58.4	180	1	GLUC_HUMAN	P01275 homo sapien
21	45	58.4	180	1	GLUC_MESAU	P01273 mesocricetu
22	45	58.4	180	1	GLUC_MOUSE	P55095 mus musculu
23	45	58.4	180	1	GLUC_OCTDE	P22890 octodon deg
24	45	58.4	180	1	GLUC_RAT	P06883 rattus norv
25	42	54.5	78	1	GLUC_LEPSP	P09566 lepisosteus
26	41	53.2	29	1	GLUC_LAMFL	Q9prq9 lampetra fl
27	41	53.2	29	1	GLUC_PLAFE	P23062 platichthys
28	41	53.2	36	1	GLU1_ORENI	P81026 oreochromis
29	41	53.2	68	1	GLUC_ONCKI	P07449 oncorhynchu
30	41	53.2	71	1	GLUC_ICTPU	P04093 ictalurus p
31	41	53.2	71	1	GLUC_PIAME	P81880 piaractus m
32	41	53.2	96	1	GLUC_MYOSC	P09686 myoxocephal
33	41	53.2	121	1	GLUC_CARAU	P79695 carassius a
34	41	53.2	122	1	GLU2_LOPAM	P04092 lophius ame
35	41	53.2	124	1	GLU1_LOPAM	P01278 lophius ame
36	41	53.2	269	1	COX3_HANWI	P48874 hansenula w
37	41	53.2	269	1	COX3_NEUCR	P00422 neurospora
38	41	53.2	576	1	YN15_YEAST	P53838 saccharomyc
39	40	51.9	72	1	VIP_BOVIN	P81401 bos taurus
40	40	51.9	72	1	VIP_CAVPO	P04566 cavia porce
41	40	51.9	170	1	VIP_MOUSE	P32648 mus musculu
42	40	51.9	170	1	VIP_RAT	P01283 rattus norv
43	40	51.9	1025	1	ACAB_ARATH	Q9m2l4 arabidopsis
44	40	51.9	1030	1	ACA4_ARATH	O22218 arabidopsis
45	39	50.6	87	1	EXE4_HELSU	P26349 heloderma s

ALIGNMENTS

RESULT 1
GIP_BOVIN
ID GIP_BOVIN STANDARD; PRT; 42 AA.
AC P09680;
DT 01-MAR-1989 (Rel. 10, Created)
DT 01-MAR-1989 (Rel. 10, Last sequence update)
DT 01-FEB-1996 (Rel. 33, Last annotation update)
DE Gastric inhibitory polypeptide (GIP) (Glucose-dependent insulinotropic
DE polypeptide).
GN GIP.
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
OC Bovidae; Bovinae; Bos.
OX NCBI_TaxID=9913;
RN [1]
RP SEQUENCE.
RX MEDLINE=85076655; PubMed=6391923;
RA Carlquist M., Maletti M., Joernvall H., Mutt V.;
RT "A novel form of gastric inhibitory polypeptide (GIP) isolated from
RT bovine intestine using a radioreceptor assay. Fragmentation with
RT staphylococcal protease results in GIP1-3 and GIP4-42, fragmentation
RT with enterokinase in GIP1-16 and GIP17-42.";
RL Eur. J. Biochem. 145:573-577(1984).
CC -!- FUNCTION: POTENT STIMULATOR OF INSULIN SECRETION AND RELATIVELY
CC POOR INHIBITOR OF GASTRIC ACID SECRETION.
CC -!- SIMILARITY: BELONGS TO THE GLUCAGON FAMILY.
DR PIR; S07231; GIBO.
DR HSSP; P01274; 1GCN.
DR InterPro; IPR000532; Glucagon.
DR Pfam; PF00123; hormone2; 1.
DR SMART; SM00070; GLUCA; 1.
DR PROSITE; PS00260; GLUCAGON; 1.
KW Glucagon family; Hormone.
SQ SEQUENCE 42 AA; 4961 MW; 7DAE3E5C09390F9F CRC64;

Query Match 100.0%; Score 77; DB 1; Length 42;
Best Local Similarity 100.0%; Pred. No. 8e-08;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 YAEGTFISDYSIAMD 15
|||||||||||||||
Db 1 YAEGTFISDYSIAMD 15

RESULT 6

GLUC_SCYCA
ID GLUC_SCYCA STANDARD; PRT; 29 AA.
AC P09687;
DT 01-MAR-1989 (Rel. 10, Created)
DT 01-MAR-1989 (Rel. 10, Last sequence update)
DT 01-JAN-1990 (Rel. 13, Last annotation update)
DE Glucagon.
OS Scyliorhinus canicula (Spotted dogfish) (Spotted catshark).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Chondrichthyes;
OC Elasmobranchii; Galeomorphii; Galeoidea; Carcharhiniformes;
OC Scyliorhinidae; Scyliorhinus.
OX NCBI_TaxID=7830;
RN [1]
RP SEQUENCE.
RC TISSUE=Pancreas;
RX MEDLINE=87190953; PubMed=3569517;
RA Conlon J.M., O'Toole L., Thim L.;
RT "Primary structure of glucagon from the gut of the common dogfish
RT (Scyliorhinus canicula).";
RL FEBS Lett. 214:50-56(1987).
CC -!- FUNCTION: PROMOTES HYDROLYSIS OF GLYCOGEN AND LIPIDS, AND RAISES
CC THE BLOOD SUGAR LEVEL.
CC -!- INDUCTION: PRODUCED IN THE A CELLS OF THE ISLETS OF LANGERHANS
CC IN RESPONSE TO A DROP IN BLOOD SUGAR CONCENTRATION.
CC -!- SIMILARITY: BELONGS TO THE GLUCAGON FAMILY.
DR PIR; A26992; GCDF.
DR HSSP; P01274; 1GCN.
DR InterPro; IPR000532; Glucagon.
DR Pfam; PF00123; hormone2; 1.
DR PRINTS; PR00275; GLUCAGON.
DR SMART; SM00070; GLUCA; 1.
DR PROSITE; PS00260; GLUCAGON; 1.
KW Glucagon family; Hormone.
SQ SEQUENCE 29 AA; 3529 MW; 6FA96392086F0226 CRC64;

Query Match 66.2%; Score 51; DB 1; Length 29;
Best Local Similarity 66.7%; Pred. No. 0.0035;
Matches 10; Conservative 2; Mismatches 3; Indels 0; Gaps 0;

Qy 1 YAEGTFISDYSIAMD 15
::|||| |||| ||
Db 1 HSEGTFTSDYSKYMD 15
Search completed: July 2, 2003, 19:12:27
Job time : 12 secs

GenCore version 5.1.6

OM protein - protein search, using sw model

Run on: July 2, 2003, 19:11:29 ; Search time 16 Seconds
(without alignments)
90.126 Million cell updates/sec

Title: US-09-937-687-1_COPY_1_15
Perfect score: 77
Sequence: 1 YAEGTFISDYSIAMD 15

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283224 seqs, 96134422 residues

Total number of hits satisfying chosen parameters: 283224

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : PIR_73:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	77	100.0	42	1	GIPG	gastric inhibitory

2	77	100.0	42	1	GIBO	gastric inhibitory
3	77	100.0	144	1	JN0589	glucose-dependent
4	77	100.0	144	2	S71426	glucose-dependent
5	77	100.0	153	1	A28406	gastric inhibitory
6	51	66.2	29	1	GCDF	glucagon - smaller
7	48	62.3	29	2	S07211	glucagon - marbled
8	47	61.0	29	1	GCEN	glucagon - elephan
9	45	58.4	29	1	GCCB	glucagon - Chinchi
10	45	58.4	29	1	GCOPV	glucagon - North A
11	45	58.4	29	1	GCDK	glucagon - duck
12	45	58.4	29	1	A61583	glucagon - ostrich
13	45	58.4	29	1	GCTTS	glucagon - slider
14	45	58.4	29	2	A91740	glucagon - turkey
15	45	58.4	29	2	A91741	glucagon - rabbit
16	45	58.4	29	2	A91742	glucagon - Arabian
17	45	58.4	29	2	C39258	glucagon - common
18	45	58.4	29	2	S39018	glucagon - bowfin
19	45	58.4	69	1	GCDG69	glucagon-69 - dog
20	45	58.4	101	1	GCFGB	glucagon precursor
21	45	58.4	151	1	GCCH	glucagon precursor
22	45	58.4	158	1	GCPG	glucagon precursor
23	45	58.4	180	1	GCHU	glucagon precursor
24	45	58.4	180	1	GCGP	glucagon precursor
25	45	58.4	180	1	GCRTDU	glucagon precursor
26	45	58.4	180	1	GCRT	glucagon precursor
27	45	58.4	180	1	GCHY	glucagon precursor
28	45	58.4	180	1	GCBO	glucagon precursor
29	45	58.4	180	2	A57294	glucagon precursor
30	45	58.4	206	2	I51301	proglucagon - chic
31	44	57.1	606	2	T09892	hypothetical prote
32	43	55.8	761	2	T07169	subtilisin-like pr
33	42	54.5	72	1	GCGXA	glucagon precursor
34	41	53.2	29	1	GCFLE	glucagon - Europea
35	41	53.2	29	2	A61135	glucagon - bigeye
36	41	53.2	60	1	GCONC	glucagon precursor
37	41	53.2	63	1	GCIDC	glucagon precursor
38	41	53.2	87	1	GCFIS	glucagon precursor
39	41	53.2	122	1	GCAF2	glucagon 2 precurs
40	41	53.2	124	1	GCAF	glucagon 1 precurs
41	41	53.2	178	2	I51058	glucagon I precurs
42	41	53.2	249	2	C83277	electron transfer
43	41	53.2	269	1	OTNC3	cytochrome-c oxida
44	41	53.2	269	2	S58746	cytochrome-c oxida
45	41	53.2	576	2	S63249	probable membrane

ALIGNMENTS

RESULT 1
GIPG
gastric inhibitory polypeptide - pig
N;Alternate names: GIP
C;Species: Sus scrofa domestica (domestic pig)
C;Date: 01-Sep-1981 #sequence_revision 01-Sep-1981 #text_change 26-Feb-1999
C;Accession: A01546; S36840
R;Jornvall, H.; Carlquist, M.; Kwauk, S.; Otte, S.C.; McIntosh, C.H.S.; Brown, J.C.; Mutt, V.
FEBS Lett. 123, 205-210, 1981
A;Title: Amino acid sequence and heterogeneity of gastric inhibitory polypeptide (GIP).
A;Reference number: A01546; MUID:81189070; PMID:7227513
A;Accession: A01546
A;Molecule type: protein
A;Residues: 1-42 <JOR>
A;Experimental source: duodenal mucosa
A;Note: a second component lacks the amino-terminal two residues
A;Note: the sequence as originally reported was found to be too long by one carboxyl-terminal Gln
R;Agerberth, B.; Boman, A.; Andersson, M.; Joernvall, H.; Mutt, V.; Boman, H.G.
Eur. J. Biochem. 216, 623-629, 1993
A;Title: Isolation of three antibacterial peptides from pig intestine: gastric inhibitory polypeptide(7-42), diazepam-binding inhibitor(32-86) and a novel factor, peptide 3910.
A;Reference number: S36839; MUID:93387315; PMID:8375398
A;Accession: S36840
A;Molecule type: protein
A;Residues: 7-42 <AGE>
C;Comment: When injected intravenously into dogs, this peptide stimulates secretion from the small intestine and inhibits gastric acid secretion, as does glucagon.
C;Superfamily: glucagon
C;Keywords: antibacterial; duodenal mucosa; duplication; hormone; intestine
F;1-42/Product: gastric inhibitory polypeptide, major component #status experimental <MAT1>
F;3-42/Product: gastric inhibitory polypeptide, minor component #status experimental <MAT2>
F;7-42/Product: gastric inhibitory polypeptide(7-42) #status experimental <MAT3>

Query Match 100.0%; Score 77; DB 1; Length 42;
Best Local Similarity 100.0%; Pred. No. 2.9e-07;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy       1 YAEGTFISDYSIAMD 15
           |||||||||||||||
Db       1 YAEGTFISDYSIAMD 15
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Search completed: July 2, 2003, 19:13:26
Job time : 17 secs

GenCore version 5.1.6

OM protein - protein search, using sw model

Run on: July 2, 2003, 19:13:09 ; Search time 50 Seconds
(without alignments)
34.498 Million cell updates/sec

Title: US-09-937-687-1_COPY_1_15
Perfect score: 77
Sequence: 1 YAEGTFISDYSIAMD 15

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 440863 seqs, 114992915 residues

Total number of hits satisfying chosen parameters: 440863

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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2: /cgn2_6/ptodata/2/pubpaa/PCT_NEW_PUB.pep:*
3: /cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep:*
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8: /cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep:*
9: /cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pep:*
10: /cgn2_6/ptodata/2/pubpaa/US09_PUBCOMB.pep:*
11: /cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep:*
12: /cgn2_6/ptodata/2/pubpaa/US10_PUBCOMB.pep:*
13: /cgn2_6/ptodata/2/pubpaa/US60_NEW_PUB.pep:*
14: /cgn2_6/ptodata/2/pubpaa/US60_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	77	100.0	30	12	US-10-003-674A-1	Sequence 1, Appli
2	77	100.0	30	12	US-10-003-674A-7	Sequence 7, Appli
3	77	100.0	42	9	US-10-004-530A-22	Sequence 22, Appl
4	77	100.0	42	9	US-10-197-954-63	Sequence 63, Appl
5	77	100.0	42	12	US-10-003-674A-11	Sequence 11, Appl
6	77	100.0	42	12	US-10-003-674A-12	Sequence 12, Appl
7	59	76.6	33	9	US-09-999-745-54	Sequence 54, Appl
8	59	76.6	33	9	US-09-554-000-38	Sequence 38, Appl
9	51	66.2	29	9	US-09-847-249A-50	Sequence 50, Appl
10	50	64.9	29	9	US-09-847-249A-49	Sequence 49, Appl
11	48	62.3	29	9	US-09-847-249A-51	Sequence 51, Appl
12	45	58.4	29	9	US-09-847-249A-8	Sequence 8, Appli
13	45	58.4	29	9	US-09-847-249A-13	Sequence 13, Appl
14	45	58.4	29	9	US-09-847-249A-65	Sequence 65, Appl
15	45	58.4	29	9	US-09-847-249A-66	Sequence 66, Appl
16	45	58.4	29	9	US-09-847-249A-67	Sequence 67, Appl
17	45	58.4	29	9	US-09-847-249A-70	Sequence 70, Appl
18	45	58.4	29	9	US-09-847-249A-71	Sequence 71, Appl
19	45	58.4	29	9	US-10-004-530A-21	Sequence 21, Appl
20	45	58.4	29	9	US-10-197-954-64	Sequence 64, Appl
21	45	58.4	29	10	US-09-847-712-8	Sequence 8, Appli
22	45	58.4	85	10	US-09-280-030-65	Sequence 65, Appl
23	45	58.4	116	10	US-09-925-297-488	Sequence 488, App
24	44	57.1	9	12	US-10-003-674A-4	Sequence 4, Appli
25	44	57.1	24	12	US-10-003-674A-2	Sequence 2, Appli
26	44	57.1	24	12	US-10-003-674A-8	Sequence 8, Appli
27	44	57.1	29	9	US-09-847-249A-52	Sequence 52, Appl
28	44	57.1	29	9	US-09-847-249A-53	Sequence 53, Appl
29	44	57.1	29	9	US-09-847-249A-54	Sequence 54, Appl
30	44	57.1	39	9	US-09-756-690A-12	Sequence 12, Appl
31	44	57.1	39	9	US-10-157-224A-12	Sequence 12, Appl
32	44	57.1	39	9	US-10-187-051-12	Sequence 12, Appl
33	44	57.1	39	10	US-09-003-869-12	Sequence 12, Appl
34	43	55.8	29	9	US-09-847-249A-34	Sequence 34, Appl
35	43	55.8	29	9	US-09-847-249A-55	Sequence 55, Appl
36	43	55.8	29	9	US-09-847-249A-57	Sequence 57, Appl

37	42	54.5	29	9	US-09-847-249A-12	Sequence 12, Appl
38	42	54.5	29	9	US-09-847-249A-21	Sequence 21, Appl
39	42	54.5	29	9	US-09-847-249A-22	Sequence 22, Appl
40	42	54.5	29	9	US-09-847-249A-26	Sequence 26, Appl
41	42	54.5	29	9	US-09-847-249A-64	Sequence 64, Appl
42	42	54.5	29	9	US-09-847-249A-69	Sequence 69, Appl
43	41	53.2	28	9	US-09-756-690A-49	Sequence 49, Appl
44	41	53.2	28	9	US-09-756-690A-109	Sequence 109, App
45	41	53.2	28	9	US-10-157-224A-49	Sequence 49, Appl

ALIGNMENTS

RESULT 1
US-10-003-674A-1
; Sequence 1, Application US/10003674A
; Patent No. US20020151495A1
; GENERAL INFORMATION:
; APPLICANT: Wolfe, M. Michael
; APPLICANT: Tseng, Chi-Chuan
; APPLICANT: Neville, Linda
; TITLE OF INVENTION: Specific Antagonists for
; TITLE OF INVENTION: Glucose-Dependent Insulinotropic Polypeptide (GIP)
; FILE REFERENCE: 50128/002003
; CURRENT APPLICATION NUMBER: US/10/003,674A
; CURRENT FILING DATE: 2002-03-05
; PRIOR APPLICATION NUMBER: US 08/984,476
; PRIOR FILING DATE: 1997-12-03
; PRIOR APPLICATION NUMBER: US 60/032,329
; PRIOR FILING DATE: 1996-12-03
; NUMBER OF SEQ ID NOS: 14
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 1
; LENGTH: 30
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-003-674A-1

Query Match 100.0%; Score 77; DB 12; Length 30;
Best Local Similarity 100.0%; Pred. No. 6.2e-07;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 YAEGTFISDYSIAMD 15


Db 1 YAEGTFISDYSIAMD 15

RESULT 3
US-10-004-530A-22
; Sequence 22, Application US/10004530A
; Publication No. US20030050436A1
; GENERAL INFORMATION:
; APPLICANT: Coy, David H.
; APPLICANT: Moreau, Jacques-Pierre
; APPLICANT: Kim, Sun H.
; TITLE OF INVENTION: OCTAPEPTIDE BOMBESIN ANALOGS
; FILE REFERENCE: 00537-00900K
; CURRENT APPLICATION NUMBER: US/10/004,530A
; CURRENT FILING DATE: 2002-08-09
; PRIOR APPLICATION NUMBER: 09/260,846
; PRIOR FILING DATE: 1999-03-02
; PRIOR APPLICATION NUMBER: 08/337,127
; PRIOR FILING DATE: 1994-11-10
; PRIOR APPLICATION NUMBER: 07/779,039
; PRIOR FILING DATE: 1991-10-18
; PRIOR APPLICATION NUMBER: 07/502,438
; PRIOR FILING DATE: 1990-03-30
; PRIOR APPLICATION NUMBER: 07/397,169
; PRIOR FILING DATE: 1989-08-21
; PRIOR APPLICATION NUMBER: 07/376,555
; PRIOR FILING DATE: 1989-07-07
; PRIOR APPLICATION NUMBER: 07/317,941
; PRIOR FILING DATE: 1989-03-02
; PRIOR APPLICATION NUMBER: 07/282,328
; PRIOR FILING DATE: 1988-12-09
; PRIOR APPLICATION NUMBER: 07/257,998
; PRIOR FILING DATE: 1988-10-14
; PRIOR APPLICATION NUMBER: 07/248,771
; PRIOR FILING DATE: 1988-09-23
; Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 26
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 22
; LENGTH: 42
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-004-530A-22

Query Match 100.0%; Score 77; DB 9; Length 42;

Best Local Similarity 100.0%; Pred. No. 8.9e-07;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 YAEGTFISDYSIAMD 15
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Db 1 YAEGTFISDYSIAMD 15

RESULT 4
US-10-197-954-63
; Sequence 63, Application US/10197954
; Publication No. US20030119021A1
; GENERAL INFORMATION:
; APPLICANT: K"ster, Hubert
; APPLICANT: Siddiqi, Suhaib
; APPLICANT: Little, Daniel
; TITLE OF INVENTION: Capture Compounds, Collections Thereof
; TITLE OF INVENTION: And Methods For Analyzing The Proteome And Complex
; TITLE OF INVENTION: Compositions
; FILE REFERENCE: 24743-2305
; CURRENT APPLICATION NUMBER: US/10/197,954
; CURRENT FILING DATE: 2002-07-16
; PRIOR APPLICATION NUMBER: 60/306,019
; PRIOR FILING DATE: 2001-07-16
; PRIOR APPLICATION NUMBER: 60/314,123
; PRIOR FILING DATE: 2001-08-21
; PRIOR APPLICATION NUMBER: 60/363,433
; PRIOR FILING DATE: 2002-03-11
; NUMBER OF SEQ ID NOS: 149
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 63
; LENGTH: 42
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-197-954-63

Query Match 100.0%; Score 77; DB 9; Length 42;
Best Local Similarity 100.0%; Pred. No. 8.9e-07;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 YAEGTFISDYSIAMD 15
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Db 1 YAEGTFISDYSIAMD 15

RESULT 7
US-09-999-745-54
; Sequence 54, Application US/09999745
; Patent No. US20020157120A1
; GENERAL INFORMATION:
; APPLICANT: THE REGENTS OF THE UNIVERSITY OF CALIFORNIA
; APPLICANT: Tsien, Roger Y.
; APPLICANT: Baird, Geoffrey
; TITLE OF INVENTION: CIRCULARLY PERMUTED FLUORESCENT PROTEIN INDICATORS
; FILE REFERENCE: REGEN1470-1
; CURRENT APPLICATION NUMBER: US/09/999,745
; CURRENT FILING DATE: 2001-10-23
; PRIOR APPLICATION NUMBER: 09/316,920
; PRIOR FILING DATE: 1999-05-21
; NUMBER OF SEQ ID NOS: 67
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 54
; LENGTH: 33
; TYPE: PRT
; ORGANISM: Sus scrofa
US-09-999-745-54

Query Match 76.6%; Score 59; DB 9; Length 33;
Best Local Similarity 73.3%; Pred. No. 0.0011;
Matches 11; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 1 YAEGTFISDYSIAMD 15
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Db 1 YADGTFISDYSAIMN 15

RESULT 8
US-09-554-000-38
; Sequence 38, Application US/09554000
; Patent No. US20020165364A1
; GENERAL INFORMATION:
; APPLICANT: Tsien, Roger Y.
; APPLICANT: Miyawaki, Atsushi
; TITLE OF INVENTION: FLUORESCENT PROTEIN SENSORS FOR
; TITLE OF INVENTION: DETECTION OF ANALYTES
; FILE REFERENCE: 07257/042001
; CURRENT APPLICATION NUMBER: US/09/554,000
; CURRENT FILING DATE: 2000-04-20
; PRIOR APPLICATION NUMBER: 08/818,252

; PRIOR FILING DATE: 1997-03-14
; NUMBER OF SEQ ID NOS: 56
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 38
; LENGTH: 33
; TYPE: PRT
; ORGANISM: Sus scrofa
US-09-554-000-38

Query Match 76.6%; Score 59; DB 9; Length 33;
Best Local Similarity 73.3%; Pred. No. 0.0011;
Matches 11; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 1 YAEGTFISDYSIAMD 15
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Db 1 YADGTFISDYSAIMN 15

RESULT 9
US-09-847-249A-50
; Sequence 50, Application US/09847249A
; Publication No. US20030032588A1
; GENERAL INFORMATION:
; APPLICANT: MARSHALL, WILLIAM S.
; APPLICANT: STARK, KEVIN LEE
; TITLE OF INVENTION: GLUCAGON ANTAGONIST
; FILE REFERENCE: A-693
; CURRENT APPLICATION NUMBER: US/09/847,249A
; CURRENT FILING DATE: 2001-05-02
; PRIOR APPLICATION NUMBER: 60/201,436
; PRIOR FILING DATE: 2000-05-03
; NUMBER OF SEQ ID NOS: 80
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 50
; LENGTH: 29
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Glucagon Antagonist
US-09-847-249A-50

Query Match 66.2%; Score 51; DB 9; Length 29;
Best Local Similarity 71.4%; Pred. No. 0.024;
Matches 10; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 2 AEGTFISDYSIAMD 15

Db 2 AQGTFISDYSKYLD 15

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GenCore version 5.1.6

OM protein - protein search, using sw model

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Title: US-09-937-687-1_COPY_1_15
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Sequence: 1 YAEGTFISDYSIAMD 15

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 262574 seqs, 29422922 residues

Total number of hits satisfying chosen parameters: 262574

Minimum DB seq length: 0
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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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4	77	100.0	42	4	US-09-260-846-21	Sequence 21, Appl
5	77	100.0	187	2	US-08-835-231-16	Sequence 16, Appl
6	77	100.0	187	4	US-09-108-661-16	Sequence 16, Appl
7	59	76.6	33	2	US-08-818-253-38	Sequence 38, Appl
8	59	76.6	33	4	US-08-818-252-38	Sequence 38, Appl
9	59	76.6	33	4	US-08-842-322-32	Sequence 32, Appl
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12	45	58.4	29	1	US-08-066-480-7	Sequence 7, Appli
13	45	58.4	29	1	US-08-255-558B-1	Sequence 1, Appli
14	45	58.4	29	1	US-08-255-558B-7	Sequence 7, Appli
15	45	58.4	29	1	US-07-937-132A-2	Sequence 2, Appli
16	45	58.4	29	1	US-08-473-334B-1	Sequence 1, Appli
17	45	58.4	29	1	US-08-473-334B-25	Sequence 25, Appl
18	45	58.4	29	1	US-08-519-180-7	Sequence 7, Appli
19	45	58.4	29	2	US-08-796-598-21	Sequence 21, Appl
20	45	58.4	29	2	US-08-447-175A-21	Sequence 21, Appl
21	45	58.4	29	3	US-09-035-485-1	Sequence 1, Appli
22	45	58.4	29	4	US-09-260-846-20	Sequence 20, Appl
23	45	58.4	29	5	PCT-US94-14934-1	Sequence 1, Appli
24	45	58.4	29	6	5169865-9	Patent No. 5169865
25	45	58.4	69	1	US-08-193-863-1	Sequence 1, Appli
26	45	58.4	69	1	US-08-377-833-1	Sequence 1, Appli
27	45	58.4	69	1	US-08-324-502-1	Sequence 1, Appli
28	45	58.4	69	1	US-08-083-501-1	Sequence 1, Appli
29	45	58.4	69	1	US-08-415-939-1	Sequence 1, Appli
30	45	58.4	69	1	US-08-548-152-1	Sequence 1, Appli
31	45	58.4	70	1	US-08-193-863-2	Sequence 2, Appli
32	45	58.4	70	1	US-08-377-833-2	Sequence 2, Appli
33	45	58.4	70	1	US-08-324-502-2	Sequence 2, Appli
34	45	58.4	70	1	US-08-083-501-2	Sequence 2, Appli
35	45	58.4	70	1	US-08-415-939-2	Sequence 2, Appli
36	45	58.4	180	3	US-08-784-582-56	Sequence 56, Appl
37	45	58.4	180	3	US-08-784-582-58	Sequence 58, Appl
38	45	58.4	180	3	US-08-784-582-61	Sequence 61, Appl
39	45	58.4	360	3	US-08-784-582-73	Sequence 73, Appl
40	42	54.5	13	4	US-08-505-250-10	Sequence 10, Appl
41	42	54.5	13	4	US-08-505-250-10	Sequence 10, Appl
42	41	53.2	29	1	US-08-062-472B-41	Sequence 41, Appl
43	40	51.9	27	1	US-08-062-472B-38	Sequence 38, Appl
44	40	51.9	27	4	US-08-472-349-7	Sequence 7, Appli

45 40 51.9 28 1 US-08-095-162-4 Sequence 4, Appli

ALIGNMENTS

RESULT 1
US-08-062-472B-44
; Sequence 44, Application US/08062472B
; Patent No. 5695954
; GENERAL INFORMATION:
; APPLICANT: Sherwood, Nancy G M
; APPLICANT: Parker, David B
; APPLICANT: McRory, John E
; APPLICANT: Lescheid, David W
; TITLE OF INVENTION: DNA ENCODING TWO FISH NEUROPEPTIDES
; NUMBER OF SEQUENCES: 49
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: KLARQUIST, SPARKMAN, CAMPBELL, LEIGH &
; ADDRESSEE: WHINSTON, LLP
; STREET: ONE WORLD TRADE CENTER, SUITE 1600, 121 S.W.
; STREET: SALMON STREET
; CITY: PORTLAND
; STATE: OREGON
; COUNTRY: USA
; ZIP: 97204-2988
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/062,472B
; FILING DATE: 14-MAY-1993
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: POLLEY, RICHARD J
; REGISTRATION NUMBER: 28107
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (503) 226-7391
; TELEFAX: (503) 228-9446
; INFORMATION FOR SEQ ID NO: 44:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 42 amino acids
; TYPE: amino acid

; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-062-472B-44

Query Match 100.0%; Score 77; DB 1; Length 42;
Best Local Similarity 100.0%; Pred. No. 4.6e-07;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 YAEGTFISDYSIAMD 15
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Db 1 YAEGTFISDYSIAMD 15

RESULT 2
US-08-835-231-11
; Sequence 11, Application US/08835231
; Patent No. 5861284
; GENERAL INFORMATION:
; APPLICANT: NISHIMURA, Osamu
; APPLICANT: KURIYAMA, Masato
; APPLICANT: KOYAMA, No. 5861284uyuki
; APPLICANT: FUKUDA, Tsunehiko
; TITLE OF INVENTION: METHOD FOR PRODUCING A BIOLOGICALLY
; TITLE OF INVENTION: ACTIVE RECOMBINANT CYSTEINE-FREE
; NUMBER OF SEQUENCES: 37
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: DIKE, BRONSTEIN, ROBERTS & CUSHMAN, LLP
; STREET: 130 WATER STREET
; CITY: BOSTON
; STATE: MA
; COUNTRY: USA
; ZIP: 02109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSEQ Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/835,231
; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/350,709
; FILING DATE: 07-DEC-1994

; APPLICATION NUMBER: 07/838,857
; FILING DATE: 18-FEB-1992
; APPLICATION NUMBER: JP 024841
; FILING DATE: 19-FEB-1991
; APPLICATION NUMBER: JP 0271438
; FILING DATE: 18-OCT-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: DAVID, RESNICK S
; REGISTRATION NUMBER: 34,235
; REFERENCE/DOCKET NUMBER: 41614-FWC
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-523-3400
; TELEFAX: 617-523-6440
; TELEX: 200291 STRE
; INFORMATION FOR SEQ ID NO: 11:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 42 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
; FRAGMENT TYPE: N-terminal
; ORIGINAL SOURCE:
US-08-835-231-11

Query Match 100.0%; Score 77; DB 2; Length 42;
Best Local Similarity 100.0%; Pred. No. 4.6e-07;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 YAEGTFISDYSIAMD 15
||||||||||||||||
Db 1 YAEGTFISDYSIAMD 15

RESULT 3
US-09-108-661-11
; Sequence 11, Application US/09108661
; Patent No. 6287806
; GENERAL INFORMATION:
; APPLICANT: NISHIMURA, Osamu
; APPLICANT: KURIYAMA, Masato
; APPLICANT: KOYAMA, No. 6287806uyuki
; APPLICANT: FUKUDA, Tsunehiko

; TITLE OF INVENTION: METHOD FOR PRODUCING A BIOLOGICALLY
; TITLE OF INVENTION: ACTIVE RECOMBINANT CYSTEINE-FREE
; NUMBER OF SEQUENCES: 37
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: DIKE, BRONSTEIN, ROBERTS & CUSHMAN, LLP
; STREET: 130 WATER STREET
; CITY: BOSTON
; STATE: MA
; COUNTRY: USA
; ZIP: 02109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSEQ Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/108,661
; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/350,709
; FILING DATE: 07-DEC-1994
; APPLICATION NUMBER: 07/838,857
; FILING DATE: 18-FEB-1992
; APPLICATION NUMBER: JP 024841
; FILING DATE: 19-FEB-1991
; APPLICATION NUMBER: JP 0271438
; FILING DATE: 18-OCT-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: DAVID, RESNICK S
; REGISTRATION NUMBER: 34,235
; REFERENCE/DOCKET NUMBER: 41614-FWC
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-523-3400
; TELEFAX: 617-523-6440
; TELEX: 200291 STRE
; INFORMATION FOR SEQ ID NO: 11:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 42 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; HYPOTHETICAL: NO
; ANTI-SENSE: NO

; FRAGMENT TYPE: N-terminal
; ORIGINAL SOURCE:
US-09-108-661-11

Query Match 100.0%; Score 77; DB 4; Length 42;
Best Local Similarity 100.0%; Pred. No. 4.6e-07;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 YAEGTFISDYSIAMD 15
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Db 1 YAEGTFISDYSIAMD 15

RESULT 4
US-09-260-846-21
; Sequence 21, Application US/09260846
; Patent No. 6307017
; GENERAL INFORMATION:
; APPLICANT: Coy, David H.
; APPLICANT: Moreau, Jacques-Pierre
; APPLICANT: Kim, Sun Hyuk
; TITLE OF INVENTION: OCTAPEPTIDE BOMBESIN ANALOGS
; FILE REFERENCE: 00537/00900J
; CURRENT APPLICATION NUMBER: US/09/260,846
; CURRENT FILING DATE: 1999-03-02
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 21
; LENGTH: 42
; TYPE: PRT
; ORGANISM: Porcine
US-09-260-846-21

Query Match 100.0%; Score 77; DB 4; Length 42;
Best Local Similarity 100.0%; Pred. No. 4.6e-07;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 YAEGTFISDYSIAMD 15
||||||||||||||||
Db 1 YAEGTFISDYSIAMD 15

RESULT 5
US-08-835-231-16
; Sequence 16, Application US/08835231

; Patent No. 5861284
; GENERAL INFORMATION:
; APPLICANT: NISHIMURA, Osamu
; APPLICANT: KURIYAMA, Masato
; APPLICANT: KOYAMA, No. 5861284uyuki
; APPLICANT: FUKUDA, Tsunehiko
; TITLE OF INVENTION: METHOD FOR PRODUCING A BIOLOGICALLY
; TITLE OF INVENTION: ACTIVE RECOMBINANT CYSTEINE-FREE
; NUMBER OF SEQUENCES: 37
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: DIKE, BRONSTEIN, ROBERTS & CUSHMAN, LLP
; STREET: 130 WATER STREET
; CITY: BOSTON
; STATE: MA
; COUNTRY: USA
; ZIP: 02109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSEQ Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/835,231
; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/350,709
; FILING DATE: 07-DEC-1994
; APPLICATION NUMBER: 07/838,857
; FILING DATE: 18-FEB-1992
; APPLICATION NUMBER: JP 024841
; FILING DATE: 19-FEB-1991
; APPLICATION NUMBER: JP 0271438
; FILING DATE: 18-OCT-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: DAVID, RESNICK S
; REGISTRATION NUMBER: 34,235
; REFERENCE/DOCKET NUMBER: 41614-FWC
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-523-3400
; TELEFAX: 617-523-6440
; TELEX: 200291 STRE
; INFORMATION FOR SEQ ID NO: 16:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 187 amino acids

; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
; FRAGMENT TYPE: N-terminal
; ORIGINAL SOURCE:
US-08-835-231-16

Query Match 100.0%; Score 77; DB 2; Length 187;
Best Local Similarity 100.0%; Pred. No. 2.7e-06;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 YAEGTFISDYSIAMD 15
||||||||||||||||
Db 2 YAEGTFISDYSIAMD 16

RESULT 6
US-09-108-661-16
; Sequence 16, Application US/09108661
; Patent No. 6287806
; GENERAL INFORMATION:
; APPLICANT: NISHIMURA, Osamu
; APPLICANT: KURIYAMA, Masato
; APPLICANT: KOYAMA, No. 6287806uyuki
; APPLICANT: FUKUDA, Tsunehiko
; TITLE OF INVENTION: METHOD FOR PRODUCING A BIOLOGICALLY
; TITLE OF INVENTION: ACTIVE RECOMBINANT CYSTEINE-FREE
; NUMBER OF SEQUENCES: 37
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: DIKE, BRONSTEIN, ROBERTS & CUSHMAN, LLP
; STREET: 130 WATER STREET
; CITY: BOSTON
; STATE: MA
; COUNTRY: USA
; ZIP: 02109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSEQ Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/108,661

; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/350,709
; FILING DATE: 07-DEC-1994
; APPLICATION NUMBER: 07/838,857
; FILING DATE: 18-FEB-1992
; APPLICATION NUMBER: JP 024841
; FILING DATE: 19-FEB-1991
; APPLICATION NUMBER: JP 0271438
; FILING DATE: 18-OCT-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: DAVID, RESNICK S
; REGISTRATION NUMBER: 34,235
; REFERENCE/DOCKET NUMBER: 41614-FWC
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-523-3400
; TELEFAX: 617-523-6440
; TELEX: 200291 STRE
; INFORMATION FOR SEQ ID NO: 16:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 187 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
; FRAGMENT TYPE: N-terminal
; ORIGINAL SOURCE:
US-09-108-661-16

Query Match 100.0%; Score 77; DB 4; Length 187;
Best Local Similarity 100.0%; Pred. No. 2.7e-06;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 YAEGTFISDYSIAMD 15
||||||||||||||||
Db 2 YAEGTFISDYSIAMD 16

RESULT 7
US-08-818-253-38
; Sequence 38, Application US/08818253
; Patent No. 5998204

; GENERAL INFORMATION:
; APPLICANT: Tsien, Roger Y.
; APPLICANT: Miyawaki, Atsushi
; TITLE OF INVENTION: FLUORESCENT PROTEIN SENSORS FOR
; TITLE OF INVENTION: DETECTION OF ANALYTES
; NUMBER OF SEQUENCES: 61
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson P.C.
; STREET: 4225 Executive Square, Suite 1400
; CITY: La Jolla
; STATE: CA
; COUNTRY: USA
; ZIP: 92037
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows 95
; SOFTWARE: FastSEQ for Windows Version 2.0b
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/818,253
; FILING DATE: 14-MAR-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Haile, Ph.D., Lisa A.
; REGISTRATION NUMBER: 38,347
; REFERENCE/DOCKET NUMBER: 07257/043001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 619/678-5070
; TELEFAX: 619/678-5099
; INFORMATION FOR SEQ ID NO: 38:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 33 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-818-253-38

Query Match 76.6%; Score 59; DB 2; Length 33;
Best Local Similarity 73.3%; Pred. No. 0.00052;
Matches 11; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 1 YAEGTFISDYSIAMD 15
||:|||||||| |:

Db 1 YADGTFISDYSAIMN 15

RESULT 8
US-08-818-252-38
; Sequence 38, Application US/08818252B
; Patent No. 6197928
; GENERAL INFORMATION:
; APPLICANT: Tsien, Roger Y.
; APPLICANT: Miyawaki, Atsushi
; TITLE OF INVENTION: FLUORESCENT PROTEIN SENSORS FOR
; TITLE OF INVENTION: DETECTION OF ANALYTES
; FILE REFERENCE: 07257/042001
; CURRENT APPLICATION NUMBER: US/08/818,252B
; CURRENT FILING DATE: 1997-03-14
; NUMBER OF SEQ ID NOS: 56
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 38
; LENGTH: 33
; TYPE: PRT
; ORGANISM: Sus scrofa
US-08-818-252-38

Query Match 76.6%; Score 59; DB 4; Length 33;
Best Local Similarity 73.3%; Pred. No. 0.00052;
Matches 11; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 1 YAEGTFISDYSIAMD 15
||:|||||||| |:
Db 1 YADGTFISDYSAIMN 15

RESULT 9
US-08-842-322-32
; Sequence 32, Application US/08842322
; Patent No. 6376257
; GENERAL INFORMATION:
; APPLICANT: Persechini, Anthony
; TITLE OF INVENTION: DETECTION BY FRET CHANGES OF LIGAND
; TITLE OF INVENTION: BINDING BY GFP FUSION PROTEINS
; NUMBER OF SEQUENCES: 33
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: NIXON, HARGRAVE, DEVANS & DOYLE LLP
; STREET: Clinton Square, P.O. Box 1051
; CITY: Rochester

; STATE: New York
; COUNTRY: USA
; ZIP: 14603
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/842,322
; FILING DATE:
; CLASSIFICATION: 436
; ATTORNEY/AGENT INFORMATION:
; NAME: BRAMAN, SUSAN J.
; REGISTRATION NUMBER: 34,103
; REFERENCE/DOCKET NUMBER: 176/60170
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 716-263-1636
; TELEFAX: 716-263-1600
; INFORMATION FOR SEQ ID NO: 32:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 33 amino acids
; TYPE: amino acid
; STRANDEDNESS: not relevant
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-842-322-32

Query Match 76.6%; Score 59; DB 4; Length 33;
Best Local Similarity 73.3%; Pred. No. 0.00052;
Matches 11; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 1 YAEGTFISDYSIAMD 15
||:|||||||| |:
Db 1 YADGTFISDYSAIMN 15

RESULT 10
US-09-316-919-54
; Sequence 54, Application US/09316919
; Patent No. 6469154
; GENERAL INFORMATION:
; APPLICANT: Tsien, Roger Y.
; APPLICANT: Baird, Geoffrey
; TITLE OF INVENTION: FLUORESCENT PROTEIN INDICATORS

; FILE REFERENCE: 07257/073001
; CURRENT APPLICATION NUMBER: US/09/316,919
; CURRENT FILING DATE: 1999-05-21
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 54
; LENGTH: 33
; TYPE: PRT
; ORGANISM: Sus scrofa
US-09-316-919-54

Query Match 76.6%; Score 59; DB 4; Length 33;
Best Local Similarity 73.3%; Pred. No. 0.00052;
Matches 11; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 1 YAEGTFISDYSIAMD 15
||:||||||| |:
Db 1 YADGTFISDYSAIMN 15

RESULT 11
US-07-741-931-2
; Sequence 2, Application US/07741931
; Patent No. 5408037
; GENERAL INFORMATION:
; APPLICANT: Smith, Robert A
; APPLICANT: Piggott, James R
; TITLE OF INVENTION: METHODS FOR DETECTING GLUCAGON ANTAGONISTS
; NUMBER OF SEQUENCES: 11
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Seed and Berry
; STREET: 6300 Columbia Center
; CITY: Seattle
; STATE: WA
; COUNTRY: USA
; ZIP: 98104-7092
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.24
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/741,931
; FILING DATE: 19910808
; CLASSIFICATION: 435

; ATTORNEY/AGENT INFORMATION:
; NAME: Maki, David J
; REGISTRATION NUMBER: 31,392
; REFERENCE/DOCKET NUMBER: 990008.413C1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 622-4900
; TELEFAX: 683-6031
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 29 amino acids
; TYPE: AMINO ACID
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-07-741-931-2

Query Match 58.4%; Score 45; DB 1; Length 29;
Best Local Similarity 53.3%; Pred. No. 0.13;
Matches 8; Conservative 4; Mismatches 3; Indels 0; Gaps 0;

Qy 1 YAEGTFISDYSIAMD 15
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Db 1 HSQGTFTSDYSKYLD 15

RESULT 12
US-08-066-480-7
; Sequence 7, Application US/08066480
; Patent No. 5424286
; GENERAL INFORMATION:
; APPLICANT: Eng, John
; TITLE OF INVENTION: Pharmaceutical Compositions And Use of
; TITLE OF INVENTION: Exendin-3 and Exendin-4 for Treatment of Diabetes Mellitus
; NUMBER OF SEQUENCES: 7
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Allegretti & Witcoff, Ltd.
; STREET: 10 S. Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: USA
; ZIP: 60606
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25

; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/066,480
; FILING DATE: 24-MAR-1993
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: McDonnell, John J
; REGISTRATION NUMBER: 26,949
; REFERENCE/DOCKET NUMBER: 93,084
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312-715-1000
; TELEFAX: 312-715-1234
; INFORMATION FOR SEQ ID NO: 7:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 29 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FEATURE:
; NAME/KEY: Peptide
; LOCATION: 1..29
; OTHER INFORMATION: /label= Glucagon
US-08-066-480-7

Query Match 58.4%; Score 45; DB 1; Length 29;
Best Local Similarity 53.3%; Pred. No. 0.13;
Matches 8; Conservative 4; Mismatches 3; Indels 0; Gaps 0;

Qy 1 YAEGTFISDYSIAMD 15
::::||| |||| :|
Db 1 HSQGTFTSDYSKYLD 15

RESULT 13
US-08-255-558B-1
; Sequence 1, Application US/08255558B
; Patent No. 5480867
; GENERAL INFORMATION:
; APPLICANT: Merrifield, Robert B.
; APPLICANT: Unson, Cecilia G.
; TITLE OF INVENTION: GLUCAGON ANALOGS WITH SERINE REPLACEMENTS
; NUMBER OF SEQUENCES: 12
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Klauber & Jackson
; STREET: 411 Hackensack Avenue

; CITY: Hackensack
; STATE: New Jersey
; COUNTRY: USA
; ZIP: 07601
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/255,558B
; FILING DATE: 8-JUN-1994
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Jackson Esq., David A.
; REGISTRATION NUMBER: 26,742
; REFERENCE/DOCKET NUMBER: 600-1-103
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 201 487-5800
; TELEFAX: 201 343-1684
; TELEX: 133521
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 29 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; DESCRIPTION: glucagon
; HYPOTHETICAL: No
; ANTI-SENSE: NO
US-08-255-558B-1

Query Match 58.4%; Score 45; DB 1; Length 29;
Best Local Similarity 53.3%; Pred. No. 0.13;
Matches 8; Conservative 4; Mismatches 3; Indels 0; Gaps 0;

Qy 1 YAEGTFISDYSIAMD 15
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Db 1 HSQGTFTSDYSKYLD 15

Search completed: July 2, 2003, 19:14:00
Job time : 28 secs

GenCore version 5.1.6

OM protein - protein search, using sw model

Run on: July 2, 2003, 19:11:25 ; Search time 35 Seconds
(without alignments)
57.107 Million cell updates/sec

Title: US-09-937-687-1_COPY_1_15
Perfect score: 77
Sequence: 1 YAEGTFISDYSIAMD 15

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 908470 seqs, 133250620 residues

Total number of hits satisfying chosen parameters: 908470

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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22: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA2001.DAT:*
23: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA2002.DAT:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	77	100.0	30	22	AAB91252	Gastrin releasing
2	77	100.0	30	22	AAB91253	Gastrin releasing
3	77	100.0	42	21	AAB26875	Primary structure
4	77	100.0	42	21	AAB26876	Primary structure
5	77	100.0	42	22	AAB91250	Gastrin releasing
6	77	100.0	42	22	AAB91251	Gastrin releasing
7	77	100.0	42	23	ABB06682	Porcine VIP family
8	77	100.0	42	23	AAU85999	Modified gastrin i
9	77	100.0	42	23	AAM52205	Synthetic gastric
10	77	100.0	153	9	AAP80287	Gastrin inhibitory
11	77	100.0	187	13	AAR26316	rhGIP-CS23 fused p
12	71	92.2	43	13	AAR22442	Gastric Inhibitory
13	60.5	78.6	32	13	AAR22441	Gastric Inhibitory
14	59	76.6	32	19	AAW71678	Gastrin inhibitory
15	59	76.6	33	22	AAB50846	Pig protein calmod
16	51	66.2	29	23	ABB04244	Glucagon antagonis
17	50	64.9	29	23	ABB04243	Glucagon antagonis
18	48	62.3	29	7	AAP60271	Sequence encoded b
19	48	62.3	29	23	ABB04245	Glucagon antagonis
20	48	62.3	31	17	AAW03890	Glucagon like pept
21	48	62.3	37	22	AAB91173	Pancreatic hormone
22	48	62.3	37	22	AAB91174	Pancreatic hormone
23	45	58.4	18	18	AAW11318	Glucagon intermedi
24	45	58.4	18	18	AAW11320	Glucagon intermedi
25	45	58.4	24	3	AAP20329	Sequence of fragme
26	45	58.4	26	6	AAP50673	Peptide portion of
27	45	58.4	27	2	AAP10171	Glucagon 1-26 hapt

28	45	58.4	29	11	AAR06284	Synthetic Glucagon
29	45	58.4	29	13	AAR23574	Glucagon (1-29) re
30	45	58.4	29	13	AAR26103	Native glucagon.
31	45	58.4	29	15	AAR50123	Native glucagon.
32	45	58.4	29	16	AAR80549	Human glucagon. H
33	45	58.4	29	17	AAR93022	Human glucagon deg
34	45	58.4	29	18	AAW11312	Glucagon prepared
35	45	58.4	29	18	AAW11625	Target peptide fro
36	45	58.4	29	18	AAW04626	Glucagon peptide f
37	45	58.4	29	20	AAY50234	Neutrophil-activat
38	45	58.4	29	21	AAB23829	Human glucagon ami
39	45	58.4	29	21	AAY59630	Mammalian glucagon
40	45	58.4	29	22	AAB91164	Pancreatic hormone
41	45	58.4	29	22	AAB91177	Pancreatic hormone
42	45	58.4	29	23	ABB06681	Mammalian VIP fami
43	45	58.4	29	23	ABB04202	Human glucagon par
44	45	58.4	29	23	ABB04207	Glucagon antagonis
45	45	58.4	29	23	ABB04259	Glucagon antagonis

ALIGNMENTS

RESULT 1
AAB91252
ID AAB91252 standard; Peptide; 30 AA.
XX
AC AAB91252;
XX
DT 22-JUN-2001 (first entry)
XX
DE Gastrin releasing peptide (GRP) SEQ ID NO:428.
XX
KW Protection; endogenous therapeutic peptide; peptidase; conjugation;
KW blood component; modification; succinimidyl; maleimido group; amino;
KW hydroxyl; thiol; hormone; growth factor; neurotransmitter.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200069900-A2.
XX
PD 23-NOV-2000.
XX
PF 17-MAY-2000; 2000WO-US13576.

XX
PR 17-MAY-1999; 99US-0134406.
PR 10-SEP-1999; 99US-0153406.
PR 15-OCT-1999; 99US-0159783.
XX
PA (CONJ-) CONJUCHEM INC.
XX
PI Bridon DP, Ezrin AM, Milner PG, Holmes DL, Thibaudeau K;
XX
DR WPI; 2001-112059/12.
XX
PT Modifying and attaching therapeutic peptides to albumin prevents
PT peptidase degradation, useful for increasing length of in vivo activity
PT -
XX
PS Disclosure; Page 338; 733pp; English.
XX
CC The present invention describes a modified therapeutic peptide (I)
CC comprising a therapeutically active amino acid region (III) and a
CC reactive group (II) (e.g. succinimidyl and maleimido groups) attached to
CC a less therapeutically active amino acid region (IV), which covalently
CC bonds with amino/hydroxyl/thiol groups on blood components to form a
CC peptidase stabilised therapeutic peptide composed of 3-50 amino acids.
CC (I) are useful for modifying therapeutic peptides e.g. hormones, growth
CC factors and neurotransmitters, to protect them from peptidase activity
CC in vivo for the treatment of various disorders. Endogenous therapeutic
CC peptides are not suitable as drug candidates as they require frequent
CC administration due to rapid degradation by peptidases in the body.
CC Modifying and attaching therapeutic peptides to albumin prevents or
CC reduces the action of peptidases to increase length of activity (half
CC life) and specificity as bonding to large molecules decreases
CC intracellular uptake and interference with physiological processes.
CC AAB90829 to AAB92441 represent peptides which can be used in the
CC exemplification of the present invention.
XX
SQ Sequence 30 AA;

Query Match 100.0%; Score 77; DB 22; Length 30;
Best Local Similarity 100.0%; Pred. No. 3.4e-06;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 YAEGTFISDYSIAMD 15
||||||||||||||||
Db 1 YAEGTFISDYSIAMD 15

RESULT 3
AAB26875
ID AAB26875 standard; protein; 42 AA.
XX
AC AAB26875;
XX
DT 31-JAN-2001 (first entry)
XX
DE Primary structure of human gastric inhibitory polypeptide (GIP).
XX
KW Gastric inhibitory peptide; GIP; insulin release; type II diabetes;
KW antidiabetic; human.
XX
OS Homo sapiens.
XX
PN WO200058360-A2.
XX
PD 05-OCT-2000.
XX
PF 29-MAR-2000; 2000WO-GB01089.
XX
PR 29-MAR-1999; 99GB-0007216.
PR 27-JUL-1999; 99GB-0017565.
XX
PA (UYUL-) UNIV ULSTER.
XX
PI O'Harte FPM, Flatt PR;
XX
DR WPI; 2000-611705/58.
XX
PT New analogs of gastric inhibitory peptide, useful for treating type II
PT diabetes, stimulate release of insulin and lower blood glucose -
XX
PS Disclosure; Page 5; 68pp; English.
XX
CC This invention relates to peptide analogues of gastric inhibitory peptide
CC (GIP) that contain at least 15 amino acids from the N-terminus of GIP.
CC GIP is an insulin releasing hormone secreted in the intestinal tract in
CC response to feeding. The invention includes pharmaceutical compositions
CC containing the GIP analogues, and a method for N-terminal modification of
CC GIP or its analogues. The analogues exhibit antidiabetic activity and are
CC useful for treating type II diabetes. The present sequence represents
CC human GIP.
XX
SQ Sequence 42 AA;

Query Match 100.0%; Score 77; DB 21; Length 42;
Best Local Similarity 100.0%; Pred. No. 4.9e-06;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 YAEGTFISDYSIAMD 15
||||||||||||||||
Db 1 YAEGTFISDYSIAMD 15

RESULT 7
ABB06682
ID ABB06682 standard; peptide; 42 AA.
XX
AC ABB06682;
XX
DT 10-JUN-2002 (first entry)
XX
DE Porcine VIP family peptide sequence SEQ ID NO:21.
XX
KW Amphibian; bombesin; gastrin-releasing peptide; GRP; GRF; litoein;
KW growth hormone releasing factor; cytostatic; antiarteriosclerotic;
KW gastrointestinal; antidiabetic; ophthalmological; atherosclerosis;
KW autocrine mitotic factor; paracrine mitotic factor; cancer; gastric;
KW malignant proliferation; benign proliferation; pancreatic secretion;
KW motility; amylase secretion suppression; appetite; muscular dystrophy;
KW diabetes.
XX
OS Sus scrofa.
XX
PN US6307017-B1.
XX
PD 23-OCT-2001.
XX
PF 02-MAR-1999; 99US-0260846.
XX
PR 10-NOV-1994; 94US-0337127.
PR 24-SEP-1987; 87US-0100571.
PR 25-MAR-1988; 88US-0173311.
PR 08-JUN-1988; 88US-0204171.
PR 16-JUN-1988; 88US-0207759.
PR 23-SEP-1988; 88US-0248771.
PR 14-OCT-1988; 88US-0257998.
PR 09-DEC-1988; 88US-0282328.
PR 02-MAR-1989; 89US-0317941.
PR 07-JUL-1989; 89US-0376555.

PR 21-AUG-1989; 89US-0397169.
PR 30-MAR-1990; 90US-0502438.
PR 18-OCT-1991; 91US-0779039.
XX
PA (BIOM-) BIOMEASURE INC.
PA (TULA) TULANE EDUCATIONAL FUND.
XX
PI Coy DH, Moreau J, Kim SH;
XX
DR WPI; 2002-162970/21.
XX
PT New antagonistic analogs of litoein and similar peptides, are useful
PT for treating malignant or benign proliferation or gastrointestinal
PT disorders -
XX
PS Disclosure; Fig 3B; 29pp; English.
XX
CC The present invention describes therapeutic peptides (A) or their salts
CC of 7-10 amino acids (aa) that are analogues of the natural peptides,
CC having C-terminal Met, litoein or the 10 aa C-terminal region of either
CC mammalian gastrin-releasing peptide (GRP) or amphibian bombesin. (A) have
CC cytostatic, antiarteriosclerotic, gastrointestinal, antidiabetic and
CC ophthalmological activities and can be used as natural peptide
CC antagonists. The peptide pyroGlu-Gln-Trp-Ala-Val-Gly-His-Leu-statine-NH2
CC has IC50 for inhibition of binding of GRP to the bombesin receptor on
CC 3T3 cells of 150 nM and IC50 for inhibition of bombesin-stimulated
CC incorporation of titrated thymidine into small cell lung cancer cells
CC (NCI-H69) of 165 nM. (A) can be used to treat conditions where the
CC substance related to (A) acts as autocrine or paracrine mitotic factor,
CC e.g. malignant or benign proliferation, e.g. cancer or atherosclerosis;
CC or disorders of gastric or pancreatic secretion or motility, e.g. to
CC suppress secretion of amylase and to control appetite (particularly
CC restoration of appetite in patients with cachexia). Antagonists of GRP
CC also suppresses the release of growth hormone so can be used to slow
CC down progression of muscular dystrophy and to treat diabetes (or
CC associated retinopathy). The present sequence represents a peptide
CC which is used in the exemplification of the present invention.
XX
SQ Sequence 42 AA;

Query Match 100.0%; Score 77; DB 23; Length 42;
Best Local Similarity 100.0%; Pred. No. 4.9e-06;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 YAEGTFISDYSIAMD 15

Db 1 YAEGTFISDYSIAMD 15

RESULT 8
AAU85999
ID AAU85999 standard; protein; 42 AA.
XX
AC AAU85999;
XX
DT 21-MAY-2002 (first entry)
XX
DE Modified gastrin inhibitory antibiotic peptide.
XX
KW Increased biological potency; prolonged activity; increased half-life;
KW glucose intolerance; insulin resistance; type II diabetes; bone disease;
KW cancer; inflammatory disorder; obesity; developmental disorder;
KW hyperproliferative skin disease; hormone-dependent disease; homeostasis;
KW intestinal disease; interleukin-8 production; smooth muscle contraction;
KW feeding; blood pressure; pancreatic secretion; mutant; mutein;
KW gastrin inhibitory peptide.
XX
OS Unidentified.
OS Synthetic.
XX
PN WO200210195-A2.
XX
PD 07-FEB-2002.
XX
PF 02-AUG-2001; 2001WO-CA01119.
XX
PR 02-AUG-2000; 2000US-222619P.
XX
PA (THER-) THERATECHNOLOGIES INC.
XX
PI Gravel D, Habi A, Abribat T;
XX
DR WPI; 2002-206179/26.
XX
PT Novel modified biological peptide with increased biological potency,
PT prolonged activity, increased half-life, for treating glucose
PT intolerance associated or not with insulin resistance pathologies, type
PT II diabetes -
XX
PS Claim 5; Page 63; 77pp; English.

XX
CC The present invention relates to modified biological peptides with
CC increased biological potency, prolonged activity and/or increased
CC half-life. The peptides of the invention are useful in the treatment
CC of glucose intolerance which may be associated with insulin resistance
CC pathologies, and in the treatment of type II diabetes. They are also
CC useful for treating bone diseases, cancer, diseases related to
CC inflammatory responses, obesity, autism, pervasive developmental
CC disorders, hyperproliferative skin diseases, hormone-dependent diseases,
CC They can be used for regulating blood glucose, enhancing mucosal
CC regeneration in patients with intestinal diseases, inhibition of
CC interleukin-8 production, stimulation of acid release, homeostasis,
CC regulation of exocrine and endocrine secretions, smooth muscle
CC contraction, feeding, blood pressure, body temperature and cell growth,
CC regulation of food intake and energy balance, and stimulation of
CC pancreatic secretion or cell growth. AAU85971-AAU86019 represent the
CC modified biological peptides of the invention.
XX
SQ Sequence 42 AA;

Query Match 100.0%; Score 77; DB 23; Length 42;
Best Local Similarity 100.0%; Pred. No. 4.9e-06;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 YAEGTFISDYSIAMD 15
||||||||||||||||
Db 1 YAEGTFISDYSIAMD 15

RESULT 9
AAM52205
ID AAM52205 standard; peptide; 42 AA.
XX
AC AAM52205;
XX
DT 11-FEB-2002 (first entry)
XX
DE Synthetic gastric inhibitory peptide SEQ ID NO 1.
XX
KW Human; gastric inhibitory polypeptide; impaired glucose tolerance; IGT;
KW impaired fasting glucose; IFG; Type-2 diabetes; GIP;
KW gastric inhibitory polypeptide.
XX
OS Synthetic.
XX

PN WO200181919-A2.
XX
PD 01-NOV-2001.
XX
PF 26-APR-2001; 2001WO-US13378.
XX
PR 27-APR-2000; 2000US-0559779.
XX
PA (BION-) BIONEBRASKA INC.
XX
PI Nauck MA, Meier JJ, Huecking K;
XX
DR WPI; 2002-026178/03.
XX
PT Determining susceptibility of an individual to developing impaired
PT glucose tolerance, fasting glucose, or Type-2 diabetes, comprises
PT administering gastric inhibitory polypeptide to the individuals and
PT assessing their response -
XX
PS Disclosure; Page 5; 44pp; English.
XX
CC The invention relates to determining susceptibility of an individual to
CC developing impaired glucose tolerance (IGT), impaired fasting glucose
CC (IFG) or Type-2 diabetes, comprising administering a gastric inhibitory
CC polypeptide (GIP), its biologically active variant or combination, to
CC the individual, assessing the response to the administration in the
CC individual, comparing it to a constant and determining the
CC susceptibility. The present sequence is that of a GIP useful to the
CC invention.
XX
SQ Sequence 42 AA;

Query Match 100.0%; Score 77; DB 23; Length 42;
Best Local Similarity 100.0%; Pred. No. 4.9e-06;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 YAEGTFISDYSIAMD 15
||||||||||||||||
Db 1 YAEGTFISDYSIAMD 15

RESULT 10
AAP80287
ID AAP80287 standard; protein; 153 AA.
XX

AC AAP80287;
XX
DT 06-DEC-1990 (first entry)
XX
DE Gastrin inhibitory polypeptide precursor.
XX
KW Gastrin inhibitory polypeptide precursor; GIP; probe; insulin;
KW diabetes.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Peptide 1..20
FT /label=signal peptide
FT Protein 52..93
FT /label=processed GIP
XX
PN EP269072-A.
XX
PD 01-JUN-1988.
XX
PF 24-NOV-1987; 87EP-0117325.
XX
PR 27-NOV-1986; 86JP-0282812.
XX
PA (SANW) SANWA KAGAKU KENKYUSHO.
XX
PI Takeda J, Imura H, Seino Y, Tanaka K, Takahashi H, Mitani T;
PI Kurono M, Sawai K;
XX
DR WPI; 1988-148897/22.
DR N-PSDB; AAN80469.
XX
PT DNA encoding human gastric inhibitory polypeptide precursor -
PT used as probe for diagnosis of diabetes and for producing
PT polypeptide(s) for diabetes treatment.
XX
PS Claim 2; Page 8; 12pp; English.
XX
CC The sequence was deduced from a cDNA sequence obtd. from a clone
CC isolated from a cDNA library prepd. from RNA extracted from the
CC duodenum of a patient undergoing a panceato-duodenectomy for
CC pancreatic cancer. The cDNA was ligated into an expression
CC vector for prodn. of recombinant GIP. GIP accelerates gastric
CC secretion and insulin secretion and can be used in the treatment

CC of diabetes. The GIP is secreted in the form of a precursor and
CC then cleaved by a protease in the bloodto form the mature GIP.
CC (This is supported by the fact that the sequence encoding the
CC proposed mature peptide is flanked by Arginine residues).
XX
SQ Sequence 153 AA;

Query Match 100.0%; Score 77; DB 9; Length 153;
Best Local Similarity 100.0%; Pred. No. 1.9e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 YAEGTFISDYSIAMD 15
||||||||||||||||
Db 52 YAEGTFISDYSIAMD 66

RESULT 11
AAR26316
ID AAR26316 standard; Protein; 187 AA.
XX
AC AAR26316;
XX
DT 04-FEB-1993 (first entry)
XX
DE rhGIP-CS23 fused protein.
XX
KW Human parathyroid hormone production; osteoporosis;
KW hypoparathyroidism; human basic fibroblast growth factor;
KW hypertension; recombinant; ss.
XX
OS Synthetic.
XX
PN EP499990-A.
XX
PD 26-AUG-1992.
XX
PF 15-FEB-1992; 92EP-0102543.
XX
PR 19-FEB-1991; 91JP-0024841.
PR 18-OCT-1991; 91JP-0271438.
PR 24-OCT-1991; 91JP-0277724.
XX
PA (TAKE) TAKEDA CHEM IND LTD.
XX
PI Fukuda T, Koyama N, Kuriyama M, Nishimura O;

XX
DR WPI; 1992-286114/35.
XX
PT Cysteine-free peptide prodn., e.g. human parathyroid hormone
PT deriv. - by culturing transformant to produce a fusion protein
PT comprising the cysteine-free peptide fused to a cysteine at its
PT N-terminus where cleavage can occur
XX
PS Example; Fig 11, 12; 60pp; English.
XX
CC The sequence is that of GIP-CS23 fused protein produced by the
CC recombinant E. coli strain MM294(DE3)-/pGS23 carrying the rhGIP-CS23
CC fused gene. It is an example of a method of culturing a transformant
CC to produce a fusion protein comprising a cysteine-free peptide fused
CC to a cysteine at its N-terminus where cleavage can occur. This method
CC can be used to produce peptides which can be used as a pharmaceutical
CC or industry in general. See also AAR26315 and AAR26317.
XX
SQ Sequence 187 AA;

Query Match 100.0%; Score 77; DB 13; Length 187;
Best Local Similarity 100.0%; Pred. No. 2.4e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 YAEGTFISDYSIAMD 15
||||||||||||||||
Db 2 YAEGTFISDYSIAMD 16

RESULT 12
AAR22442
ID AAR22442 standard; Protein; 43 AA.
XX
AC AAR22442;
XX
DT 21-AUG-1992 (first entry)
XX
DE Gastric Inhibitory Peptide analogue.
XX
KW GIP; medicines; diabetes; glucose; insulin.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Misc-difference 14

FT /label= OTHER
FT /note= "OTHER= any residue other than Met"
FT Modified-site 43
FT /note= "Hse or HseNH2"
XX
PN EP479210-A.
XX
PD 08-APR-1992.
XX
PF 30-SEP-1991; 91EP-0116704.
XX
PR 05-OCT-1990; 90JP-0266438.
XX
PA (SANW) SANWA KAGAKU KENKYUSHO.
XX
PI Kurono M, Mitani T, Takahashi H, Unno R, Suzuki T;
PI Hayashi Y, Kobayashi Y, Ishii Y;
XX
DR WPI; 1992-115986/15.
XX
PT New analogues of gastric inhibitory peptide - useful for
PT treatment of diabetes
XX
PS Claim 1; Example 2; 11pp; English.
XX
CC The analogues can be prepd. using a peptide synthesiser or by
CC recombinant DNA techniques. They are prepd. having an extra three
CC residues: Met-Ala-Ser at the C-terminal, then treated with CNBr to
CC cleave before the Met residue. The peptides are then chemically
CC modified to add the Hse or HseNH2 (homoserine lactone) residue at
CC the C-terminal. The analogues of GIP are useful as effective
CC ingredients for medicines esp. for curing diabetes, and have
CC biological activities comparable to or higher than that of native
CC GIP. The substitution of Met at position 14 of the native peptide
CC facilitates preparation by removing the CNBr cleavage site.
CC See also AAR22441.
XX
SQ Sequence 43 AA;

Query Match 92.2%; Score 71; DB 13; Length 43;
Best Local Similarity 93.3%; Pred. No. 5.3e-05;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 YAEGTFISDYSIAMD 15
||||||||||||| |

Db 1 YAEGTFISDYSIAXD 15

RESULT 14
AAW71678
ID AAW71678 standard; Peptide; 32 AA.
XX
AC AAW71678;
XX
DT 11-JAN-1999 (first entry)
XX
DE Gastrin inhibitory peptide-derived target peptide.
XX
KW Calmodulin; green fluorescent protein; GFP; cameleon;
KW fluorescence resonance energy transfer; FRET; calcium; sensor;
KW analysis; assay; gastrin inhibitory peptide; VIP.
XX
OS Synthetic.
XX
PN WO9840477-A1.
XX
PD 17-SEP-1998.
XX
PF 13-MAR-1998; 98WO-US04978.
XX
PR 27-AUG-1997; 97US-0919143.
PR 14-MAR-1997; 97US-0818252.
PR 14-MAR-1997; 97US-0818253.
XX
PA (REGC) UNIV CALIFORNIA.
XX
PI Miyawaki A, Tsien RY;
XX
DR WPI; 1998-520809/44.
XX
PT New fluorescent protein sensors for detection of analytes -
PT comprises a binding protein moiety having an analyte binding region
PT and bound donor and acceptor fluorescent protein moieties
XX
PS Disclosure; Page 22; 108pp; English.
XX
CC This peptide represents a target moiety from gastrin inhibitory
CC peptide that is recognised by calmodulin. The invention provides
CC fluorescent indicators and methods for using them to determine the
CC concentration of an analyte, such as calcium ion, in vitro and in

CC vivo. Fluorescent indicators include a binding protein moiety
CC (e.g. calmodulin) and donor and acceptor fluorescent protein
CC moieties, preferably derived from Aequorea green fluorescent
CC protein (see AAW71645-48). The binding protein preferably binds
CC target peptides (see AAW71649-79) in addition to the analyte. The
CC target peptide moieties can be modified to enhance the response of
CC the fluorescent indicator to the analyte.
XX
SQ Sequence 32 AA;

Query Match 76.6%; Score 59; DB 19; Length 32;
Best Local Similarity 73.3%; Pred. No. 0.0043;
Matches 11; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 1 YAEGTFISDYSIAMD 15
||:|||||||| |:
Db 1 YADGTFISDYSAIMN 15

RESULT 15
AAB50846
ID AAB50846 standard; Peptide; 33 AA.
XX
AC AAB50846;
XX
DT 14-MAR-2001 (first entry)
XX
DE Pig protein calmodulin-binding domain.
XX
KW Fluorescent protein indicator; green fluorescent protein; GFP;
KW linker moiety; sensor; calmodulin-binding domain.
XX
OS Sus scrofa.
XX
PN WO200071565-A2.
XX
PD 30-NOV-2000.
XX
PF 17-MAY-2000; 2000WO-US13684.
XX
PR 21-MAY-1999; 99US-0316919.
PR 21-MAY-1999; 99US-0316920.
XX
PA (REGC) UNIV CALIFORNIA.
XX

PI Tsien RY, Baird GA;
XX
DR WPI; 2001-032017/04.
XX
PT Novel fluorescent proteins comprising a sensor protein inserted into
PT them, useful for measuring the response of a sensor biological,
PT chemical, electrical or physiological parameter in vivo or in vitro -
XX
PS Disclosure; Page 33; 94pp; English.
XX
CC The present sequence is a calmodulin-binding domain peptide used in the
CC construction of a fluorescent protein indicator. The indicator comprises
CC a sensor polypeptide that is responsive to a chemical, biological,
CC electrical or physiological parameter, and a fluorescence protein
CC functional group. The sensor polypeptide is operatively inserted into the
CC fluorescent moiety. The fluorescent indicator is useful for detecting the
CC presence of a response inducing member in a sample. The method involves
CC contacting the sample with the indicator and detecting a change in
CC fluorescence, in which a change is indicative of the effect of the
CC parameter on the sensor polypeptide. The novel fluorescent proteins are
CC advantageous due to their reduced size as compared to the FRET
CC (fluorescence resonance energy transfer)-based sensors.
XX
SQ Sequence 33 AA;

Query Match 76.6%; Score 59; DB 22; Length 33;
Best Local Similarity 73.3%; Pred. No. 0.0044;
Matches 11; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 1 YAEGTFISDYSIAMD 15
||:||||||| |:
Db 1 YADGTFISDYSAIMN 15

Search completed: July 2, 2003, 19:12:10
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L1           52 SEA FILE=REGISTRY ABB=ON  PLU=ON  YAEGTFISDYSIAMD/SQSP
L2          168 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L1
L3          165 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L2 AND PD<= MAY 9, 2002
L7            8 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L3 AND PATENT/DT


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L7   ANSWER 1 OF 8  HCAPLUS  COPYRIGHT 2003 ACS
ACCESSION NUMBER:         2002:107371  HCAPLUS
DOCUMENT NUMBER:          136:161700
TITLE:                    Modified biological peptides with increased potency
                          for use in treating pathologies related to insulin
                          resistance, glucose intolerance and/or type II
                          diabetes
INVENTOR(S):              Gravel, Denis; Habi, Abdelkrim; Abribat, Thierry
PATENT ASSIGNEE(S):       Theratechnologies Inc., Can.
SOURCE:                   PCT Int. Appl., 77 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.        KIND  DATE          APPLICATION NO.  DATE
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     WO 2002010195      A2   20020207      WO 2001-CA1119   20010802 <--
     WO 2002010195      A3   20021003
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             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
             RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
             UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
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DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

EP 1305338 A2 20030502 EP 2001-957662 20010802

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PRIORITY APPLN. INFO.: US 2000-222619P P 20000802

WO 2001-CA1119 W 20010802

AB The present invention is concerned with modified biol. peptides providing increased potency, prolonged activity and/or increased half-life thereof. The modification is made via coupling through an amide bond with at least one conformationally rigid substituent, either at the N-terminal of the peptide, the C-terminal of the peptide, on a free amino or carboxyl group along the peptide chain, or at a plurality of these sites. Those peptides exhibit clin. usefulness for example in treating states of insulin resistance assocd. with pathologies such as type II diabetes.

IT **397438-90-3**

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(modified biol. peptides with increased potency for use in treating pathologies related to insulin resistance, glucose intolerance and/or type II diabetes)

L7 ANSWER 2 OF 8 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:824291 HCAPLUS

DOCUMENT NUMBER: 134:21425

TITLE: Protection of endogenous therapeutic peptides from peptidase activity through conjugation to blood components

INVENTOR(S): Bridon, Dominique P.; Ezrin, Alan M.; Milner, Peter G.; Holmes, Darren L.; Thibaudeau, Karen

PATENT ASSIGNEE(S): Conjuchem, Inc., Can.

SOURCE: PCT Int. Appl., 733 pp.

CODEN: PIXXD2

DOCUMENT TYPE: **Patent**

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000069900	A2	20001123	WO 2000-US13576	20000517 <--
WO 2000069900	A3	20010215		
WO 2000069900	C2	20020704		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

WO 2000070665	A2	20001123	WO 2000-IB763	20000517 <--
WO 2000070665	A3	20010419		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1105409	A2	20010613	EP 2000-936023	20000517 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
EP 1171582	A2	20020116	EP 2000-929748	20000517 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
EP 1264840	A1	20021211	EP 2002-14617	20000517
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
JP 2003500341	T2	20030107	JP 2000-619018	20000517
JP 2003508350	T2	20030304	JP 2000-618316	20000517
US 6514500	B1	20030204	US 2000-657332	20000907
US 2003108567	A1	20030612	US 2002-287892	20021104
US 2003108568	A1	20030612	US 2002-288340	20021104

PRIORITY APPLN. INFO.:

US 1999-134406P	P	19990517
US 1999-153406P	P	19990910
US 1999-159783P	P	19991015
EP 2000-932570	A3	20000517
WO 2000-IB763	W	20000517
WO 2000-US13576	W	20000517
US 2000-657332	A3	20000907

AB A method for protecting a peptide from peptidase activity in vivo, the peptide being composed of between 2 and 50 amino acids and having a C-terminus and an N-terminus and a C-terminus amino acid and an N-terminus amino acid is described. In the first step of the method, the peptide is modified by attaching a reactive group to the C-terminus amino acid, to the N-terminus amino acid, or to an amino acid located between the N-terminus and the C-terminus, such that the modified peptide is capable of forming a covalent bond in vivo with a reactive functionality on a blood component. The solid phase peptide synthesis of a no. of derivs. with 3-maleimidopropionic acid (3-MPA) is described. In the next step, a covalent bond is formed between the reactive group and a reactive functionality on a blood component to form a peptide-blood component conjugate, thereby protecting said peptide from peptidase activity. The final step of the method involves the analyzing of the stability of the peptide-blood component conjugate to assess the protection of the peptide from peptidase activity. Thus, the percentage of a K5 kringle peptide (Pro-Arg-Lys-Leu-Tyr-Asp-Lys-NH2) conjugated to human serum albumin via MPA remained relatively const. through a 24-h plasma assay in contrast to unmodified K5 which decreased to 9% of the original amt. of K5 in only 4 h in plasma.

IT **11063-17-5**, Gastric inhibitory polypeptide (swine major)
100040-31-1, Gastric inhibitory polypeptide (human)
RL: PRP (Properties)
(unclaimed protein sequence; protection of endogenous therapeutic peptides from peptidase activity through conjugation to blood components)

IT **134875-67-5**, 1-30-Gastric inhibitory polypeptide (swine major)
RL: PRP (Properties)
(unclaimed sequence; protection of endogenous therapeutic peptides from peptidase activity through conjugation to blood components)

L7 ANSWER 3 OF 8 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:	2000:707210 HCAPLUS
DOCUMENT NUMBER:	133:276799
TITLE:	GIP analogs for treating diabetes
INVENTOR(S):	O'Harte, Finbarr Paul Mary; Flatt, Peter Raymond
PATENT ASSIGNEE(S):	University of Ulster, UK
SOURCE:	PCT Int. Appl., 68 pp. CODEN: PIXXD2
DOCUMENT TYPE:	**Patent**
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000058360	A2	20001005	WO 2000-GB1089	20000329 <--
WO 2000058360	A3	20010125		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1171465	A2	20020116	EP 2000-912766	20000329 <--

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

PRIORITY APPLN. INFO.:

GB 1999-7216	A	19990329
GB 1999-17565	A	19990727
WO 2000-GB1089	W	20000329

OTHER SOURCE(S): MARPAT 133:276799

AB The present invention provides peptides which stimulate the release of insulin. The peptides, based on GIP 1-42 include substitutions and/or modifications which enhance and influence secretion and/or have enhanced resistance to degrdn. The invention also provides a process of N terminally modifying GIP and the use of the peptide analogs for treatment of diabetes.

IT **100040-31-1DP**, Gastric inhibitory polypeptide (human), analogs
299897-75-9P 299898-33-2P, Human N-acetyl GIP
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(GIP analogs for treating diabetes)

IT **11063-17-5**, Gastric inhibitory polypeptide (swine major)
100040-31-1, Gastric inhibitory polypeptide (human)
RL: PRP (Properties)
(unclaimed protein sequence; gIP analogs for treating diabetes)

L7 ANSWER 4 OF 8 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:457193 HCAPLUS
DOCUMENT NUMBER: 133:84752
TITLE: Preparation and therapeutic uses of PTH functional domain conjugate peptides, derivatives thereof, and novel tethered ligand-receptor molecules
INVENTOR(S): Gardella, Thomas J.; Kronenberg, Henry M.; Potts, John T.; Juppner, Harald
PATENT ASSIGNEE(S): USA
SOURCE: PCT Int. Appl., 119 pp.
CODEN: PIXXD2
DOCUMENT TYPE: **Patent**
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000039278	A2	20000706	WO 1999-US31108	19991230 <--

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,

SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,
AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
EP 1147133 A2 20011024 EP 1999-968197 19991230 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO
JP 2002533115 T2 20021008 JP 2000-591171 19991230
PRIORITY APPLN. INFO.: US 1998-114577P P 19981231
WO 1999-US31108 W 19991230

OTHER SOURCE(S): MARPAT 133:84752

AB Novel parathyroid hormone (PTH) peptides and analogs thereof of the PTH(1-34) fragments are disclosed that combine the N-terminal signaling domain (residues 1-9) and the C-terminal binding domain (residues 15-31) via a linker. Nucleic acid mols. and peptides for PTH(1-9)-(Gly)5-PTH(15-31)(PG5) and PTH(1-9)-(Gly)7-PTH(15-31) and a novel PTH receptor are disclosed. Addnl., methods of screening for PTH agonists, pharmaceutical compns. and methods of treatment are disclosed.

IT **100040-31-1**, Gastric inhibitory polypeptide (human)
RL: PRP (Properties)
(unclaimed protein sequence; prepn. and therapeutic uses of PTH functional domain conjugate peptides, derivs. thereof, and novel tethered ligand-receptor mols.)

L7 ANSWER 5 OF 8 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1997:733047 HCAPLUS
DOCUMENT NUMBER: 127:341803
TITLE: Method for lowering the blood glucose level in mammals
INVENTOR(S): Demuth, Hans-Ulrich; Rosche, Fred; Schmidt, Joern; Pauly, Robert P.; McIntosh, Christopher H. S.; Pederson, Ray A.
PATENT ASSIGNEE(S): Hans-Knoell-Institut fuer Naturstoff-Forschung e.V., Germany
SOURCE: Ger. Offen., 7 pp.
CODEN: GWXXBX
DOCUMENT TYPE: **Patent**
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19616486	A1	19971030	DE 1996-19616486	19960425 <--
DE 19616486	C2	19990812		
CA 2252576	AA	19971106	CA 1997-2252576	19970424 <--
WO 9740832	A1	19971106	WO 1997-DE820	19970424 <--
W: AU, CA, CN, JP, KR, MX, NZ, RU, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9730233	A1	19971119	AU 1997-30233	19970424 <--
AU 721477	B2	20000706		
EP 896538	A1	19990217	EP 1997-924866	19970424 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
CN 1216468	A	19990512	CN 1997-194017	19970424 <--
EP 1084705	A2	20010321	EP 2000-119496	19970424 <--
EP 1084705	A3	20020515		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
AT 202705	E	20010715	AT 1997-924866	19970424 <--
JP 2001510442	T2	20010731	JP 1997-538453	19970424 <--
ES 2158562	T3	20010901	ES 1997-924866	19970424 <--
RU 2189233	C2	20020920	RU 1998-121213	19970424

US 6303661 B1 20011016 US 1998-155833 19981006 <--
PRIORITY APPLN. INFO.: DE 1996-19616486 A 19960425
EP 1997-924866 A3 19970424
WO 1997-DE820 W 19970424

AB Administration of agents which lower the blood dipeptidyl peptidase IV activity decreases the degrdn. of the (endogenous or exogenous) insulinotropic peptides, (1-42)-gastric inhibitory polypeptide and (7-36)-glucagonlike peptide 1 amide, and consequently enhances the insulinotropic stimulation of integrin receptors on pancreatic islet cells, stimulates carbohydrate metab., and decreases the serum glucose level. Thus, isoleucyl thiazolidide (0.1 mg i.v.) administration to rats after intraduodenal administration of glucose dose-dependently lowered the blood glucose level.

IT **11063-17-5**, Gastric inhibitory polypeptide (swine major)
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(inhibition of degrdn. of; method for lowering blood glucose level in mammals)

L7 ANSWER 6 OF 8 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1992:504265 HCAPLUS
DOCUMENT NUMBER: 117:104265
TITLE: Gastric inhibitory peptide analogs, their preparation, and use as antidiabetics
INVENTOR(S): Kurono, Masayasu; Mitani, Takahiko; Takahashi, Haruo; Unno, Ryoichi; Suzuki, Tomoo; Hayashi, Yuji; Kobayashi, Yohei; Ishii, Yoko; Sawai, Kiichi
PATENT ASSIGNEE(S): Sanwa Kagaku Kenkyusho Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 11 pp.
CODEN: EPXXDW
DOCUMENT TYPE: **Patent**
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 479210	A2	19920408	EP 1991-116704	19910930 <--
EP 479210	A3	19920902		
EP 479210	B1	19950531		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
JP 04145099	A2	19920519	JP 1990-266438	19901005 <--
ES 2076437	T3	19951101	ES 1991-116704	19910930 <--

PRIORITY APPLN. INFO.: JP 1990-266438 19901005
OTHER SOURCE(S): MARPAT 117:104265

AB C-terminal truncated human gastric inhibitory peptides (GIPs) with an amino acid other than Met at position 14 are synthesized. These analogs were shown to be as effective as unaltered human GIP in stimulating glucose-dependent insulin secretion in rat spleen cells.

IT **143079-14-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and cyanogen bromide cleavage of)

L7 ANSWER 7 OF 8 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1988:584959 HCAPLUS
DOCUMENT NUMBER: 109:184959
TITLE: Cloning of DNA encoding human gastric inhibitory polypeptides (GIP) precursor and expression of the precursor
INVENTOR(S): Takeda, Jun; Imura, Hiroo; Seino, Yutaka; Tanaka, Kenichi; Takahashi, Haruo; Mitani, Takahiko; Kurono, Masayasu; Sawai, Kiichi
PATENT ASSIGNEE(S): Sanwa Kagaku Kenkyusho Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 12 pp.
CODEN: EPXXDW

DOCUMENT TYPE: **Patent**
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 269072	A2	19880601	EP 1987-117325	19871124 <--
EP 269072	A3	19890614		
EP 269072	B1	19920923		
R: CH, DE, FR, GB, IT, LI				
JP 01153092	A2	19890615	JP 1986-282812	19861127 <--

PRIORITY APPLN. INFO.: JP 1986-282812 19861127
AB The cDNA for human GIP precursor is cloned and sequenced.
IT **112956-34-0**
RL: PRP (Properties)
(amino acid sequence of and cloning in Escherichia coli of cDNA for)

L7 ANSWER 8 OF 8 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1977:453598 HCAPLUS
DOCUMENT NUMBER: 87:53598
TITLE: Polypeptide
INVENTOR(S): Kubota, Minoru
PATENT ASSIGNEE(S): Daiichi Seiyaku Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF

DOCUMENT TYPE: **Patent**
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 52010273	A2	19770126	JP 1975-85029	19750711 <--
JP 53033590	B4	19780914		

PRIORITY APPLN. INFO.: JP 1975-85029 19750711
AB A digestive tract peptide hormone, Tyr-Ala-Glu-Gly-Thr-Phe-Ile-Ser-Asp-Tyr-Ser-Ile-Ala-Met-Asp-Lys-Ile-Arg-Gln-Gln-Asp-Phe-Val-Asn-Trp-Leu-Leu-Ala-Gln-Gln-Lys-Gly-Lys-Lys-Ser-Asp-Trp-Lsy-His-Asn-Ile-Thr-Gln was prepd. by reaction of (un)protected octapeptide Tyr-Ala-Glu-Gly-Thr-Phe-Ile-Ser with (un)protected pentatriacontapeptide Asp-Tyr-Ser-Ile-Ala-Met-Asp-Lys-Ile-Arg-Gln-Gln-Asp-Phe-Val-Asn-Trp-Leu-Leu-Ala-Gln-Gln-Lys-Gly-Lys-Lys-Ser-Asp-Trp-Lys-His-Asn-Ile-Thr-Gln followed by deprotection if needed.
IT **11063-17-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

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=>

=> select hit rn l7 1-8
E37 THROUGH E44 ASSIGNED

=> fil reg
FILE 'REGISTRY' ENTERED AT 19:44:38 ON 02 JUL 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file

provided by InfoChem.

STRUCTURE FILE UPDATES: 1 JUL 2003 HIGHEST RN 540721-20-8
DICTIONARY FILE UPDATES: 1 JUL 2003 HIGHEST RN 540721-20-8

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

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Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

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(FILE 'HCAPLUS' ENTERED AT 19:44:10 ON 02 JUL 2003)
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FILE 'REGISTRY' ENTERED AT 19:44:38 ON 02 JUL 2003
L8 8 S E37-E44
L9 8 S L8 AND L1

=> d sqide l9 1-8

L9 ANSWER 1 OF 8 REGISTRY COPYRIGHT 2003 ACS
RN **397438-90-3** REGISTRY
CN L-Glutamine, L-tyrosyl-L-alanyl-L-.alpha.-glutamylglycyl-L-threonyl-L-phenylalanyl-L-isoleucyl-L-seryl-L-.alpha.-aspartyl-L-tyrosyl-L-seryl-L-isoleucyl-L-alanyl-L-methionyl-L-.alpha.-aspartyl-L-lysyl-L-isoleucyl-L-histidyl-L-glutaminyl-L-glutaminyl-L-.alpha.-aspartyl-L-phenylalanyl-L-valyl-L-asparaginyl-L-tryptophyl-L-leucyl-L-leucyl-L-alanyl-L-glutaminyl-L-lysylglycyl-L-lysyl-L-lysyl-L-asparaginyl-L-.alpha.-aspartyl-L-tryptophyl-L-lysyl-L-histidyl-L-asparaginyl-L-isoleucyl-L-threonyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 30: PN: WO0210195 PAGE: 63 claimed sequence
FS PROTEIN SEQUENCE
SQL 42

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	WO2002010195 claimed PAGE 63

SEQ 1 YAEGTFISDY SIAMDKIHQQ DFVNWLLAQK GKKNDWKHNI TQ
========== =====
HITS AT: 1-15

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA

LC STN Files: CA, CAPLUS
            1 REFERENCES IN FILE CA (1957 TO DATE)
            1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

L9 ANSWER 2 OF 8 REGISTRY COPYRIGHT 2003 ACS
RN **299898-33-2** REGISTRY
CN Gastric inhibitory polypeptide (human), N-acetyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Human N-acetyl GIP
FS PROTEIN SEQUENCE
SQL 42
NTE modified

type	------ location ------		description
terminal mod.	Tyr-1	-	N-acetyl

SEQ 1 YAEGTFISDY SIAMDKIHQQ DFVNWLLAQK GKKNDWKHNI TQ
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HITS AT: 1-15

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF C228 H340 N60 O67 S
CI MAN
SR CA
LC STN Files: CA, CAPLUS
            2 REFERENCES IN FILE CA (1957 TO DATE)
            2 REFERENCES IN FILE CAPLUS (1957 TO DATE)

L9 ANSWER 3 OF 8 REGISTRY COPYRIGHT 2003 ACS
RN **299897-75-9** REGISTRY
CN Gastric inhibitory polypeptide (human), N-(1-deoxy-D-glucitol-1-yl)- (9CI)
    (CA INDEX NAME)
FS PROTEIN SEQUENCE
SQL 42

SEQ 1 YAEGTFISDY SIAMDKIHQQ DFVNWLLAQK GKKNDWKHNI TQ
       ========== =====
HITS AT: 1-15

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF C232 H350 N60 O71 S
CI MAN
SR CA
LC STN Files: CA, CAPLUS
            1 REFERENCES IN FILE CA (1957 TO DATE)
            1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

L9 ANSWER 4 OF 8 REGISTRY COPYRIGHT 2003 ACS
RN **143079-14-5** REGISTRY
CN Gastric inhibitory polypeptide (swine major), 14-L-leucine-18-L-histidine-
    34-L-asparagine-42a-L-methionine-42b-L-alanine-42c-L-serine- (9CI) (CA
    INDEX NAME)
OTHER CA INDEX NAMES:
CN Gastric inhibitory polypeptide (pig major), 14-L-leucine-18-L-histidine-34-
    L-asparagine-42a-L-methionine-42b-L-alanine-42c-L-serine-
FS PROTEIN SEQUENCE
SQL 45

SEQ 1 YAEGTFISDY SIAMDKIHQQ DFVNWLLAQK GKKNDWKHNI TQMAS
       ========== =====
HITS AT: 1-15

MF C238 H359 N63 O70 S
CI MAN
SR CA
LC STN Files: CA, CAPLUS
1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

L9 ANSWER 5 OF 8 REGISTRY COPYRIGHT 2003 ACS
RN **134875-67-5** REGISTRY
CN 1-30-Gastric inhibitory polypeptide (swine major) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Gastric inhibitory polypeptide (pig major), 31-deglycine-32-de-L-lysine-33-de-L-lysine-34-de-L-serine-35-de-L-aspartic acid-36-de-L-tryptophan-37-de-L-lysine-38-de-L-histidine-39-de-L-asparagine-40-de-L-isoleucine-41-de-L-threonine-42-de-L-glutamine-
OTHER NAMES:
CN 247: PN: WO0069900 SEQID: 428 unclaimed sequence
CN 248: PN: WO0069900 SEQID: 429 unclaimed sequence
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL 30

PATENT ANNOTATIONS (PNTE):

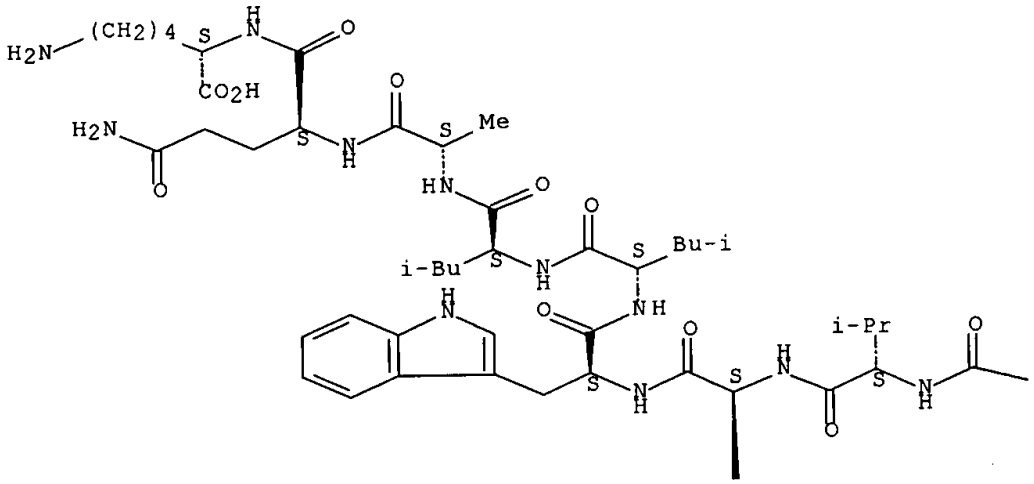
Sequence Source	Patent Reference
Not Given	WO2000069900 unclaimed SEQID 428
	WO2000069900 unclaimed SEQID 429

SEQ 1 YAEGTFISDY SIAMDKIRQQ DFVNWLLAQK
========== =====
HITS AT: 1-15

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF C162 H244 N40 O48 S
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.

PAGE 1-A



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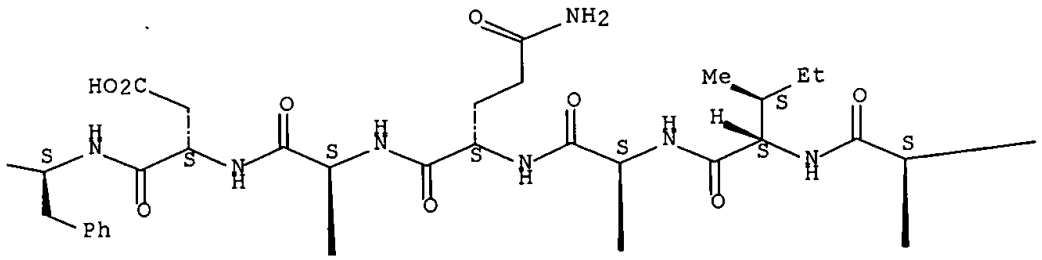

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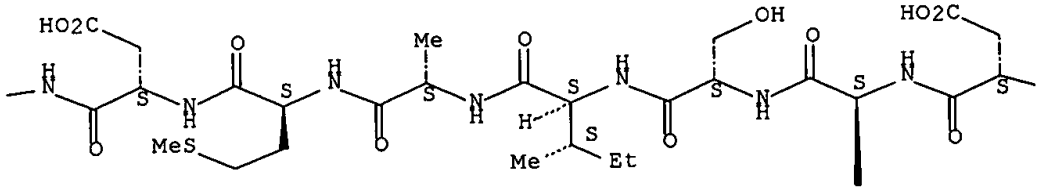

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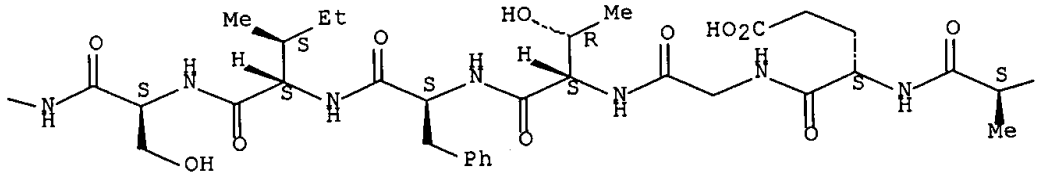

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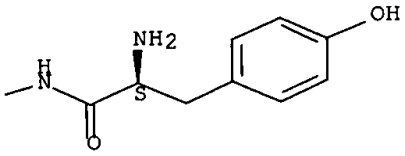

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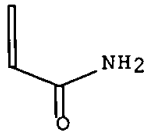

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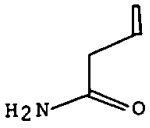

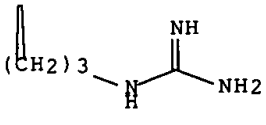

4 REFERENCES IN FILE CA (1957 TO DATE)
4 REFERENCES IN FILE CAPLUS (1957 TO DATE)

L9 ANSWER 6 OF 8 REGISTRY COPYRIGHT 2003 ACS
RN **112956-34-0** REGISTRY
CN Gastric inhibitory polypeptide, prepro- (human clone phGIP-3 reduced) (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE
SQL 153

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151 RSR
HITS AT: 52-66

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS
3 REFERENCES IN FILE CA (1957 TO DATE)
3 REFERENCES IN FILE CAPLUS (1957 TO DATE)

L9 ANSWER 7 OF 8 REGISTRY COPYRIGHT 2003 ACS
RN **100040-31-1** REGISTRY
CN Gastric inhibitory polypeptide (human) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Gastric inhibitory polypeptide (pig major), 18-L-histidine-34-L-asparagine-
OTHER NAMES:
CN 19: PN: WO0039278 SEQID: 25 unclaimed protein
CN 1: PN: WO0058360 PAGE: 5 unclaimed protein
CN 244: PN: WO0069900 SEQID: 426 unclaimed protein
CN Human gastric inhibitory polypeptide
CN L-Glutamine, L-tyrosyl-L-alanyl-L-.alpha.-glutamylglycyl-L-threonyl-L-phenylalanyl-L-isoleucyl-L-seryl-L-.alpha.-aspartyl-L-tyrosyl-L-seryl-L-isoleucyl-L-alanyl-L-methionyl-L-.alpha.-aspartyl-L-lysyl-L-isoleucyl-L-histidyl-L-glutaminyl-L-glutaminyl-L-.alpha.-aspartyl-L-phenylalanyl-L-valyl-L-asparaginyl-L-tryptophyl-L-leucyl-L-leucyl-L-alanyl-L-glutaminyl-L-lysylglycyl-L-lysyl-L-lysyl-L-asparaginyl-L-.alpha.-aspartyl-L-tryptophyl-L-lysyl-L-histidyl-L-asparaginyl-L-isoleucyl-L-threonyl-
FS PROTEIN SEQUENCE
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PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
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|unclaimed
|PAGE 5
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|WO2000069900
|unclaimed
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DR 91930-95-9, 281200-78-0
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CI MAN
SR CA
LC STN Files: BIOBUSINESS, CA, CAPLUS, CASREACT, CHEMCATS, CSCHEM, DDFU, DRUGU, MSDS-OHS, TOXCENTER
49 REFERENCES IN FILE CA (1957 TO DATE)
4 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
51 REFERENCES IN FILE CAPLUS (1957 TO DATE)

L9 ANSWER 8 OF 8 REGISTRY COPYRIGHT 2003 ACS
RN **11063-17-5** REGISTRY
CN Gastric inhibitory polypeptide (swine major) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Gastric inhibitory polypeptide (pig major)
OTHER NAMES:
CN 245: PN: WO0069900 SEQID: 427 unclaimed protein
CN 2: PN: WO0058360 PAGE: 5 unclaimed protein
CN Gastric inhibitory polypeptide (pig)
CN Gastric inhibitory polypeptide (porcine)
CN L-Glutamine, L-tyrosyl-L-alanyl-L-.alpha.-glutamylglycyl-L-threonyl-L-phenylalanyl-L-isoleucyl-L-seryl-L-.alpha.-aspartyl-L-tyrosyl-L-seryl-L-isoleucyl-L-alanyl-L-methionyl-L-.alpha.-aspartyl-L-lysyl-L-isoleucyl-L-arginyl-L-glutaminyl-L-glutaminyl-L-.alpha.-aspartyl-L-phenylalanyl-L-valyl-L-asparaginyl-L-tryptophyl-L-leucyl-L-leucyl-L-alanyl-L-glutaminyl-L-lysylglycyl-L-lysyl-L-lysyl-L-seryl-L-.alpha.-aspartyl-L-tryptophyl-L-lysyl-L-histidyl-L-asparaginyl-L-isoleucyl-L-threonyl-
CN Pig gastric inhibitory polypeptide
CN Porcine gastric inhibitory peptide
CN Porcine gastric inhibitory polypeptide
FS PROTEIN SEQUENCE
SQL 42

PATENT ANNOTATIONS (PNTE):
Sequence |Patent
Source |Reference
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Not Given|WO2000058360
|unclaimed
|PAGE 5
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DR 54651-41-1, 57157-69-4
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CI MAN
LC STN Files: AGRICOLA, CA, CAPLUS, CASREACT, CHEMCATS, TOXCENTER, USPATFULL
106 REFERENCES IN FILE CA (1957 TO DATE)
106 REFERENCES IN FILE CAPLUS (1957 TO DATE)

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FILE COVERS 1907 - 2 Jul 2003  VOL 139 ISS 1
FILE LAST UPDATED: 1 Jul 2003  (20030701/ED)

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.


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L2           168 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L1
L3           165 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L2 AND PD<= MAY 9, 2002
L4             2 SEA FILE=REGISTRY ABB=ON  PLU=ON  L1 AND SQL=15
L7             8 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L3 AND PATENT/DT
L8             8 SEA FILE=REGISTRY ABB=ON  PLU=ON  (100040-31-1/BI OR 11063-17-5
                 /BI OR 112956-34-0/BI OR 134875-67-5/BI OR 143079-14-5/BI OR
                 299897-75-9/BI OR 299898-33-2/BI OR 397438-90-3/BI)
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L10            2 SEA FILE=REGISTRY ABB=ON  PLU=ON  L4 NOT L9
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ENTER ANSWER NUMBER OR RANGE (1):end

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L12  ANSWER 1 OF 2  HCAPLUS  COPYRIGHT 2003 ACS
ACCESSION NUMBER:         2001:334123  HCAPLUS
DOCUMENT NUMBER:          135:117303
TITLE:                    Identification of a bioactive domain in the
                          amino-terminus of glucose-dependent insulinotropic
                          polypeptide (GIP)
AUTHOR(S):                Hinke, S. A.; Manhart, S.; Pamir, N.; Demuth, H.-U.;
                          Gelling, R. W.; Pederson, R. A.; McIntosh, C. H. S.
CORPORATE SOURCE:         Department of Physiology, Faculty of Medicine,
                          University of British Columbia, Vancouver, BC, V6T
```

1Z3, Can.
SOURCE: Biochimica et Biophysica Acta (2001), 1547(1), 143-155
CODEN: BBACAQ; ISSN: 0006-3002
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The incretins are a class of hormones released from the small bowel that act on the endocrine pancreas to potentiate insulin secretion in a glucose-dependent manner. Due to the requirement for an elevated glucose concn. for activity, the incretins, glucose-dependent insulinotropic polypeptide (GIP) and glucagon-like peptide-1, have potential in the treatment of non-insulin-dependent diabetes mellitus. A series of synthetic peptide GIP fragments was generated for the purpose of elucidating the bioactive domain of the mol. Peptides were screened for stimulation of cAMP accumulation in Chinese hamster ovary cells transfected with the rat islet GIP receptor. Of the GIP fragments tested, GIP1-14 and GIP19-30 demonstrated the greatest cAMP-stimulating ability over the range of concns. tested (up to 20 .mu.M). In contrast, GIP fragments corresponding to amino acids 15-42, 15-30, 16-30 and 17-30 all demonstrated weak antagonism of GIP1-42 activity. Competitive-binding displacement studies indicated that these peptides were low-affinity ligands for the GIP receptor. To examine biol. activity in vivo, a bioassay was developed in the anesthetized rat. I.v. infusion of GIP1-42 (1 pmol/min/100 g) with a concurrent i.p. glucose load (1 g/kg) significantly reduced circulating blood glucose excursions through stimulation of insulin release. Higher doses of GIP1-14 and GIP19-30 (100 pmol/min/100 g) also reduced blood glucose excursions.

IT **343376-47-6 351224-37-8**
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(GIP and GIP fragments receptor binding, cAMP-producing and insulinotropic activity in relation to structure)

REFERENCE COUNT: 56 THERE ARE 56 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:868282 HCAPLUS
DOCUMENT NUMBER: 135:28620
TITLE: Analogs of glucose-dependent insulinotropic polypeptide with increased dipeptidyl peptidase IV resistance
AUTHOR(S): Kuhn-Wache, Kerstin; Manhart, Susanne; Hoffmann, Torsten; Hinke, Simon A.; Gelling, R.; Pederson, Raymond A.; McIntosh, Christopher H. S.; Demuth, Hans-Ullrich
CORPORATE SOURCE: Probiodrug GmbH, Halle/Saale, 06120, Germany
SOURCE: Advances in Experimental Medicine and Biology (2000), 477, 187-195
CODEN: AEMBAP; ISSN: 0065-2598
PUBLISHER: Kluwer Academic/Plenum Publishers
DOCUMENT TYPE: Journal
LANGUAGE: English

May 2000 Adonis

AB The incretin GIP (glucose-dependent insulinotropic polypeptide), a 42 amino acid peptide, is released from the K-cells of the small intestine into the blood in response to oral nutrient ingestion. GIP inhibits the secretion of gastric acid and promotes the release of insulin from pancreatic islet cells. A study was conducted in which N- and C-terminal truncated fragments as well as various GIP analogs with a reduced peptide bond or alterations of the amino acids close to the dipeptidyl peptidase IV (DPIV) specific cleavage site were synthesized with the goal of improving DPIV-resistance and a prolonged half-time. Findings indicated that DPIV-resistant analogs of GIP1-30 could be synthesized. The

introduction of D-amino acids in the P1 and P1'-position resulted in a slight redn. in binding and bioactivity. The examd. C-terminal truncated fragments showed no binding affinity, whereas the antagonistic N-terminal truncated fragments were able to bind to transfected rat GIP receptor. These results emphasize the hypothesis of an existing one-receptor-two-interaction-sites-model which was shown for peptides of the GRF-family. Concerning the potential use of GIP analogs in the treatment of type II diabetes mellitus, these results offer the possibility of synthesizing analogs with reasonable half-life times and physiol. relevant binding affinities and bioactivity.

IT **343376-47-6P**
RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)
(analogs of glucose-dependent insulinotropic polypeptide with increased dipeptidyl peptidase IV resistance)

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 1 JUL 2003 HIGHEST RN 540721-20-8
DICTIONARY FILE UPDATES: 1 JUL 2003 HIGHEST RN 540721-20-8

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

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L4 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2003 ACS
RN 351224-37-8 REGISTRY
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FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **15**
NTE modified

type	------ location ------	description

terminal mod. Asp-15 - C-terminal amide

SEQ 1 YAEGTFISDY SIAMD
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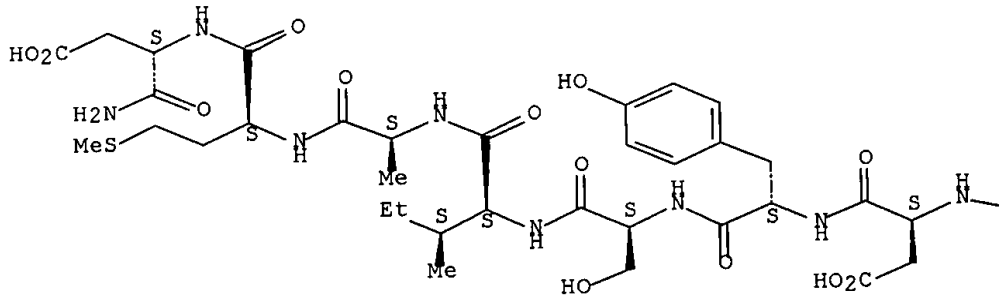
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

PAGE 1-A



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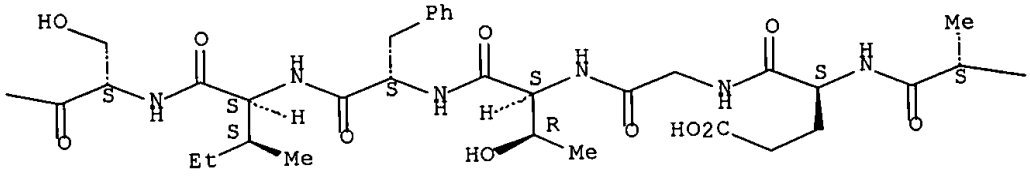

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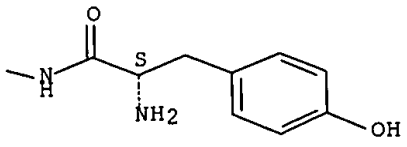

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1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

L4 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2003 ACS
RN 343376-47-6 REGISTRY
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FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **15**

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HITS AT: 1-15

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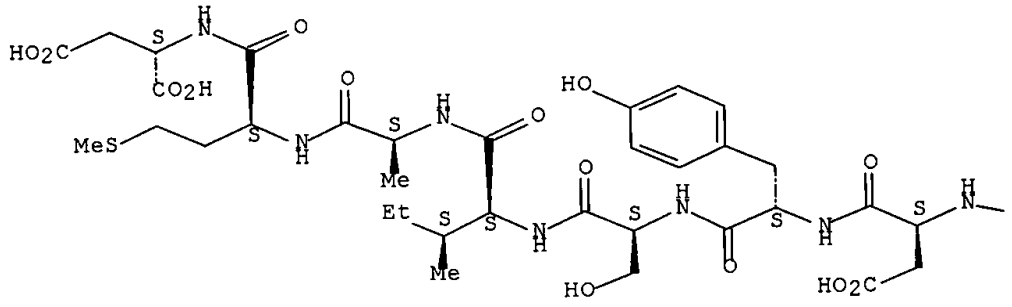
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

PAGE 1-A



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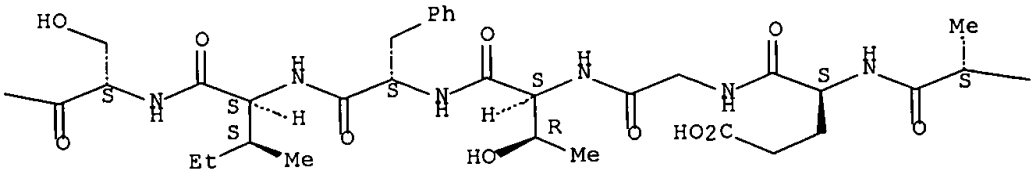

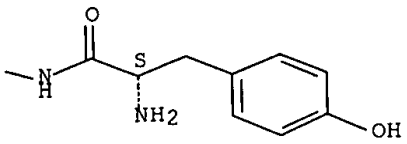

2 REFERENCES IN FILE CA (1957 TO DATE)
2 REFERENCES IN FILE CAPLUS (1957 TO DATE)

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